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**JUN 26 2013**

June 26, 2013

Mr. Patrick Colcord, On-Scene Coordinator  
Indiana Department of Environmental Management  
Office of Land Quality  
Compliance Response Branch  
100 North Senate Avenue  
MC 66-30-2 Shadeland  
Indianapolis, IN 46204-2251

**DEPARTMENT OF  
ENVIRONMENTAL MANAGEMENT  
OFFICE OF LAND QUALITY**

RE: Citizens Energy Group Plummer Field Rollison II Tank Battery Incident Greene County, Indiana  
IDEM Incident #37035

Dear Mr. Colcord,

In response to your letter dated June 3, 2013, the following narrative describes Indiana Department of Environmental Management (IDEM) Incident No. 37035, which originated at the Rollison II tank battery operated by Citizens Energy Group (Citizens) located within Plummer Field (Greene County Indiana). Plummer Station, the nearest manned Citizens facility to the Rollison II tank battery is located at 2431 South 275 West, Bloomfield, Indiana 47424. To locate the Rollison II tank battery from Plummer Station turn south on County Road 275 West, and travel to the intersection of County Road 275 West and County Road 275 South. Turn East on County Road 275 South and travel to the intersection of County Road 275 South and County Road 250 West. Turn south on County Road 250 West and travel approximately one mile to the Rollison II tank battery located on the west side of the road. GPS coordinates of the Rollison II tank battery are: 38 58.335N, 086 59.252W.

Incident Brief

On May 22, 2013, between approximately 6:00 AM and 9:00 AM, a 16,926 gallon (403 barrel) oil/water separator tank at the Rollison II tank battery released a mixture of crude oil (see attached MSDS sheet) and salt water into the secondary containment berm (firewall) surrounding the tank battery. The crude oil/salt water mixture escaped the firewall and flowed southwest through a hay field and then into a ditch that runs west along the southern boundary of the field before turning south toward White River. A portion of the crude oil and salt water entered the ditch up-gradient of the point where it turns to the south. The release was discovered by Citizens staff during a routine daily inspection at approximately 9:00 AM on the day of the incident. It is estimated that a total volume of approximately 19,320 gallons (460 barrels) of fluid was released. The total volume was composed of 5,040 gallons (120 barrels) of crude oil and 14,280 gallons (340 barrels) of salt water.

Despite careful inspection of the separator by both Citizens personnel and the manufacturer's representative, the exact cause of the failure could not be determined<sup>1</sup>. The most likely explanations for the failure are:

- 1) A pre-existing crack in the tank progressively enlarged over time and eventually caused the tank to fail.
- 2) A rock or other sharp object in the underlying soil initiated a crack in the tank bottom.
- 3) A manufactured defect occurred in the tank bottom.

Regardless of the actual cause, failure of the tank resulted in loss of the entire volume it contained (15,960 gallons (380 barrels). Note: this is less than the total capacity of the tank because of a crossover pipe which forces the oil into a stock tank as the separator fills with fluid. After the separator failed, the Rollison #3 and Rollison #7 oil production wells continued to pump approximately 3,360 gallons (80 barrels) into the oil/water separator until the release was discovered and the wells were shut off.

#### Notifications & Responding Agencies

IDEM was notified of the incident by Citizens via phone on May 22, 2013 at 10:50 AM. Mr. Patrick Colcord of IDEM, Emergency Response arrived on site on May 24, 2013 at approximately 11:00 AM. Citizens also notified the Indiana Department of Natural Resources (IDNR) via phone on May 22, 2013 at 10:57 AM. Mr. Doug Kearby of the IDNR, Division of Oil & Gas arrived on site on May 22, 2013 at 3:57PM. At 5:15 PM Citizens met with the landowner (Mr. Tony Schantz) to discuss remediation options for the portions of his pasture affected by the release and replacement of the hay damaged as a result of the incident.

#### Response Activities

Following discovery of the release at approximately 9:00 AM on May 22, 2013, several steps were immediately initiated to stop the flow of crude oil, prevent it from reaching the White River and prevent further migration of crude oil from the vicinity of the Rollison II tank battery and hay field. As previously stated, Rollison #3 and Rollison #7 wells were shut off to stop the production of additional fluids. Citizens personnel then traced the path of the released crude oil across the hayfield and into the ditch from the point where the oil entered to determine the best location for construction of an earthen dam to prevent further migration of fluids downstream.

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<sup>1</sup> It should be noted that Citizens has successfully used fiberglass oil/water separators in the Plummer Oil Field for over twenty years without ever experiencing a similar failure.

Citizens constructed the earthen dam at a point in the ditch approximately 1.5 miles from White River and approximately ¼ mile from the tank battery. No oil or salt water flowed downstream from the dam site. The dam was composed of native clay soil with large round hay bales placed in the ditch on the upstream side of the dam to stop the flow of released fluids and create a location from which the oil could be removed and recovered. Oil absorbent booms were placed at strategic locations in the ditch to capture the oil as it flowed toward the earthen dam. Oil absorbent booms were also placed at the upstream side of the small recovery pond created by the construction of the earthen dam. Citizens then traversed the affected length of the ditch and removed debris/obstacles to optimize flow to the recovery pond.

A 75-80 barrel tanker truck was brought to the dam site and used to vacuum the crude oil flowing in from the ditch as it reached the boomed area of the recovery pond on the upstream side of the dam. To date approximately 23.5 tanker truck loads (74,025-78,960 gallons) have been removed from the recovery pond and transported to one of the salt water collecting ponds operated by Citizens. The oil will be skimmed off the ponds, placed in a stock tank and the salt water will be returned to the subsurface via Class II injection wells. The tanker truck loads consist mainly of water from the ditch and crude oil flushed from the vegetation in the affected part of the ditch by runoff. Crude oil is carried to the recovery pond by the normal flow of storm water in the ditch eliminating the need to flush the ditch by artificial methods. Citizens personnel continue to monitor the recovery pond and recover crude oil that has flowed in from the ditch. At present, there is virtually no oil reaching the retention pond. On May 23, 2013, a "trash pump" was placed at the earthen dam to allow the clear water in the recovery pond to be pumped down in order to increase the flow of oil and salt water in the ditch and deliver more crude oil to the pond. This measure was also needed to prevent the pond from overtopping the dam in the event of heavy rainfall. The tanker truck was also used to recover a pool of crude oil observed at the point where the ditch turns to the south.

On May 24, 2013, approximately 60 straw bales were delivered to the tank battery site and used to form a barrier just south of the lease road and absorb any material migrating from the vicinity of the tank battery. A similar barrier was built at the south edge of the hay field adjacent to the ditch to prevent movement of oil from the field into the ditch in the event of precipitation. Straw bales were also placed at the southwest corner of the hay field where the field meets the portion of the ditch where it turns to the south to catch any runoff that might enter there. Citizens personnel then removed/recovered residual crude oil and water remaining within the firewall and patched the inside of the structure with clay to prevent any additional release. Citizens continues to monitor the integrity of the structure and remove/recover crude oil and water as needed.

### Remediation Activities

Citizens met with Mr. Patrick Colcord, On-Scene Coordinator (IDEM) on May 24, 2013, to review the details of the incident, discuss methods to prevent further release of oil, and remediate the areas of the site affected by the release. After discussions with Mr. Connor Schantz, the son and representative of the land owner, and Mr. Dave Gelhausen, Citizens Spill Prevention Control & Countermeasure (SPCC) Coordinator, several additional actions were requested by Mr. Colcord and subsequently completed by Citizens.

On May 25, 2013, mowing of the pasture began in preparation for soil excavation, and to remove the grass. This action was undertaken because a significant amount of the oil adhered to the above ground portions of the grass plants as the oil and water flowed through the field away from the tank battery. The tall grass plants in the hay field were mowed as close to the soil surface as possible and the cut grass was allowed to dry and then raked in preparation for loading into lined roll-off dumpsters for disposal by Republic Services in the Sycamore Ridge Landfill near Terre Haute, Indiana. Mowing was completed on May 27, 2013. On May 28, 2013, Republic Services began delivering lined roll-off dumpsters for disposal of the mown hay and excavated soil.

On May 28, 2013, Mr. Colcord and Mr. Connor Schantz marked a large area of the hay field that they believed to be affected by the release with flags and Citizens personnel began excavating up to four inches of soil throughout the flagged area as requested by Mr. Colcord. Soil excavation of the designated area between the lease road and the first line of straw bales (area "A" on Figure 1.) was completed on May 29, 2013. Excavated soil was loaded into lined roll-off dumpsters as they became available or placed in a holding area in the hay field to be subsequently loaded into lined roll-off dumpsters for disposal.

On May 28, 2013, the following Incident Response Work Plan was developed (as outlined by Mr. Colcord) to coordinate remediation activities.

- ☐ Scrape up hay and surface soil in heavily stained areas near tank battery and in field beyond first row of hay bales. Collect soil samples periodically.
- ☐ Disc residual soil and apply amendments.
- ☐ Continue pumping oily water from dike area (dam site in drainage ditch).
- ☐ Assess ditch area (and flush if feasible).
- ☐ Mr. Conner Schantz prefers "letting nature take its course is better than flushing" (with pumping at dam site).
- ☐ Place hay and soil in roll-off containers for off site disposal.
- ☐ Assess brine impact.
- ☐ Assess possible use of surfactants in ditch area.

On May 29, 2013, the straw bale barrier nearest the Rollison II tank battery was relocated beyond the western boundary of the mowed area to allow better access by heavy equipment to



the excavation area south of the first line of straw bales (area "B" on Figure 1.) while still providing protection against the migration of crude oil into the ditch and hay field to the west of the excavation area. Soil excavation was completed in area "B" on June 5, 2013. The hauling and disposal of excavated material was completed by Republic Services on June 13, 2013. Due to the large amount of soil removed (approximately 382 tons) and the low weight limit imposed by the local roads, lined roll-off dumpsters could only be partially filled, requiring a large number of units to legally and safely haul the material. Limited availability of sufficient roll-off dumpster units extended the time required to complete disposal of the excavated material. A safety meeting was held on May 29, 2013, to discuss a work site safety plan. The plan was drafted by Citizens later that day. On May 30, 2013, Mr. Colcord observed oil exiting a field tile at the western margin of the hay field. Sorbent pads were placed at this point to capture the oil and prevent further migration into the ditch. On May 31, 2013, EFI Global, Inc. was retained by Citizens to collect a series of soil samples from the waste stockpile consisting of the excavated soil.

On June 3, 2013, a 6-inch underflow drain was installed in the earthen dam to reduce pumping requirements and more effectively prevent the possibility of overtopping the dam during heavy rainfall. The same day a meeting was conducted with the land owner, IDEM staff and Citizens to discuss a sampling plan, recommended parameters to be sampled for the hay field and to review strategies for adding and amending the new soil that is to be placed in the excavated area.

On June 4, 2013, the western portion of the hay field was mowed with a bush hog. Citizens personnel reported no visible oil in the newly mowed portion of the hay field. An inspection of the ditch was undertaken on June 5, 2013, from the location where the release entered the ditch and downstream to the earthen dam. No visible oil was observed in the ditch.

On June 10, 2013, the analytical test results for the soil samples collected from the waste stockpiles by EFI Global, Inc. were received. Additional soil sampling was performed by EFI Global, Inc. on June 12, 2013. These samples were collected at locations marked by numbered flags within the area of stressed vegetation to the west/southwest of the excavation area as recommended by Mr. Colcord. The purpose of the samples is to provide a baseline concentration of polynuclear aromatic hydrocarbons (PAHs) and total chlorides. Future samples will be collected from this area to monitor the degradation of these parameters. A total of seven samples from root base to a depth of approximately 3 inches were collected. The analytical results, site plans and figures, photographic and laboratory documentation for the baseline soil samples and the waste stockpiles are attached to this report (Figure 3.).

On June 13, 2013, the failed oil/water separator at the Rollison II tank battery was prepared for removal and it was hauled to the Plummer Station yard on June 14.

### Pending Work

At the time of this report soil and soil amendments acceptable to the land owner have not yet been delivered. On June 6, 2013, Citizens personnel escorted Mr. Tony Schantz to Boyd Trucking in Washington, Indiana to inspect topsoil for potential use to replace the excavated soil. Mr. Schantz verbally approved this soil for the stated purpose and the material should be delivered in June or early July.

Following placement of the topsoil, the area will periodically be disced to aerate the soil and volatilize any residual hydrocarbons. Soil samples will periodically be collected to verify that remediation has been effective and that concentrations of PAHs and total chlorides have degraded to acceptable levels.

Monitoring of surface water in the drainage ditch at the temporary dam site will continue and any residual oil discovered will be collected and transferred to one of Citizens salt water collecting ponds.

### Conclusion

The incident originating from the oil/water separator at the Rollison II tank battery involved the release of approximately 19,320 gallons (460 barrels) of oil and water. An estimated 5,040 gallons (120 barrels) of crude oil was released. Citizens believes that all crude oil has been recovered and/or removed from the site except the residual portion which will be addressed through implementation of the Incident Response Work Plan as outlined in this report. The effectiveness of remediation activities will be verified by the collection and analysis of future confirmatory soil samples and monitoring of the recovery pond. Approximately 382 tons of contaminated soil was removed from the hay field at the direction of IDEM and the land owner. New soil and soil amendments acceptable to the land owner will be purchased by Citizens to restore the field to hay production and round hay bales will be cut and delivered to the land owner to compensate for the crop damage caused by the incident. A new oil/water separator is to be installed at the Rollison II tank battery on a rebuilt foundation. The firewall/secondary containment will be fortified with additional clay and tested to insure against leakage.

Please contact Mark Richards, Environmental Specialist, Citizens Energy Group at 317-429-3572 with any questions.

Page: 7  
Mr. Patrick Colcord  
June 26, 2013

Sincerely Yours,

A handwritten signature in black ink, appearing to read 'C. Braun', with a large, loopy 'C' and a stylized 'B'.

Christopher H. Braun, P.E.

Vice President, Energy Operations

Enclosures:

Figure 1: Rollison II Site Map

Figure 2: Plummer Field Area Map

Figure 3: Soil Sampling Map and Analytical Results

Attachment 1: Material Safety Data Sheet for Crude Oil

Attachment 2: Copies of Landfill Receipts

Attachment 3: Photo Documentation of Response & Remediation Activities

Figure 1.

# Rollison II Site Map

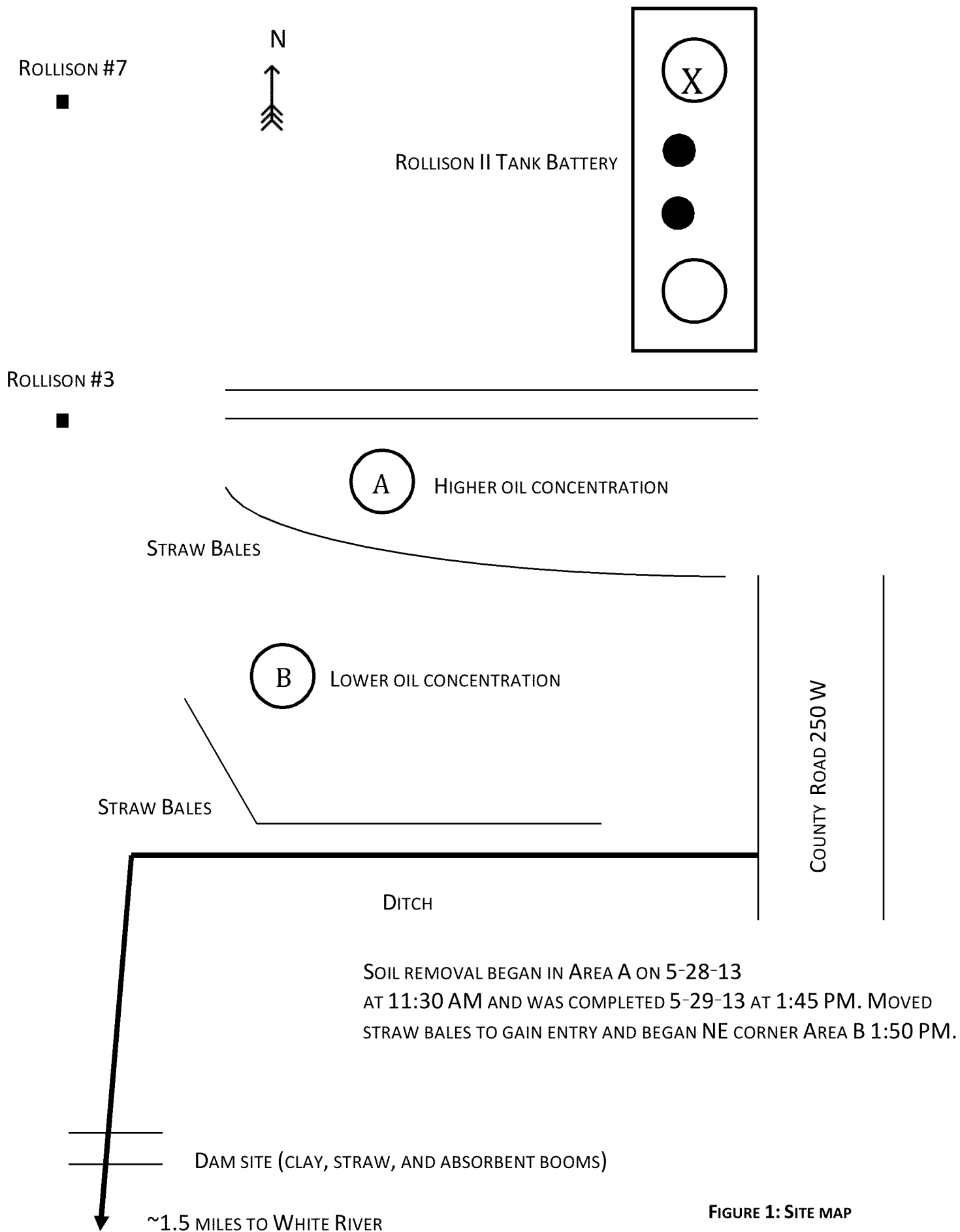


Figure 2.

Plummer Field Area Map

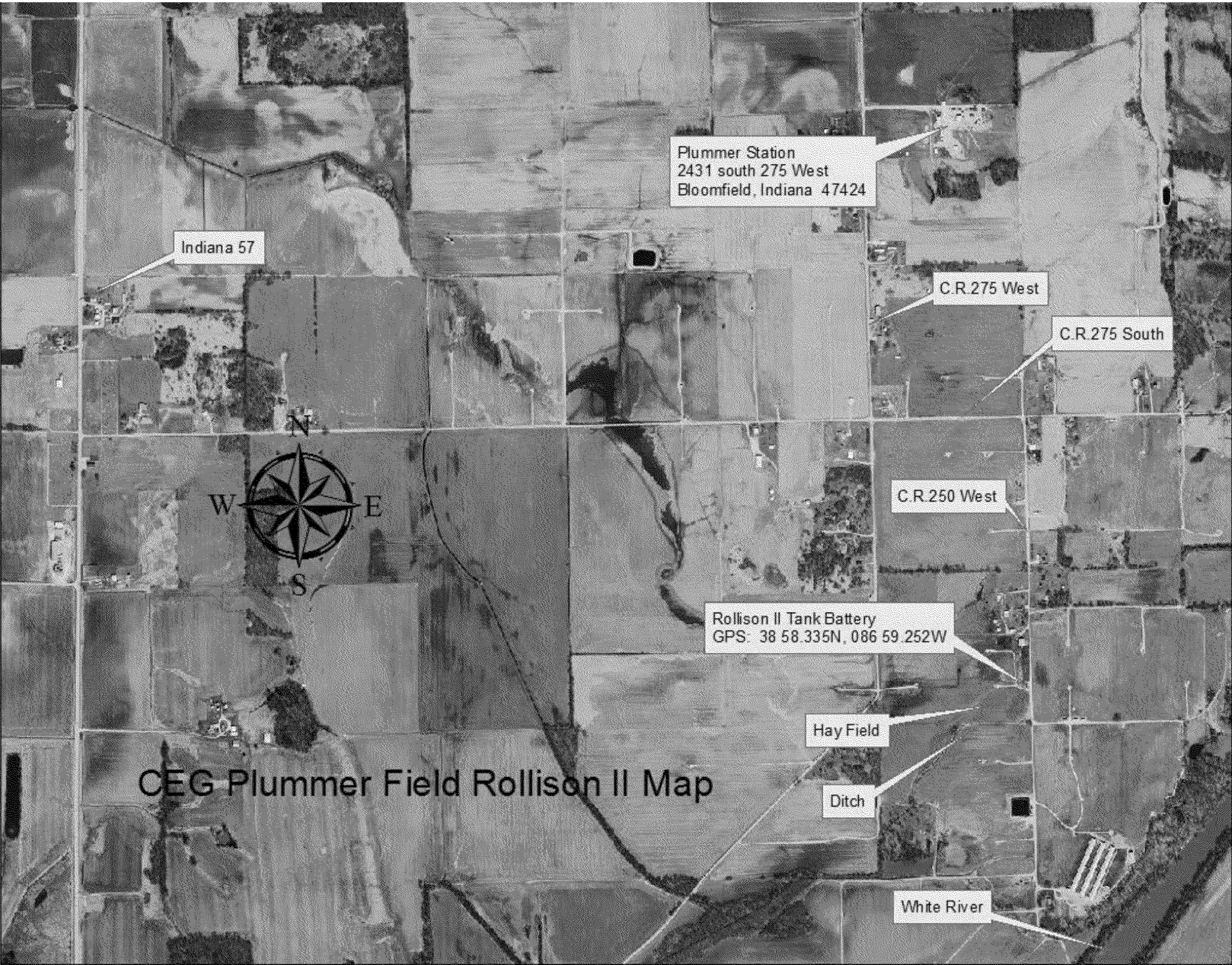


Figure 3.

Soil Sampling Map and  
Analytical Results





## **PHASE II ENVIRONMENTAL SITE ASSESSMENT**

Plummer Field  
State Road 57 and County Road 275 South  
Plummer, Indiana 47424  
EFI Project Number: 98510-05144

June 24, 2013

*Prepared For:*

David L. Gelhausen, MS, LPG  
Manager, Underground Storage Fields & Oil Operations  
Citizens Energy Group  
Highway 157 N  
Worthington, Indiana 47471

*Prepared By:*

EFI Global  
8091 Center Run Drive  
Suite 191  
Indianapolis, IN 46250

June 24, 2013

David L. Gelhausen, MS, LPG  
Manager, Underground Storage Fields & Oil Operations  
Citizens Energy Group  
Highway 157 N  
Worthington, Indiana 47471

RE: Phase II Environmental Site Assessment  
Plummer Field  
State Road 57 and County Road 275 South  
Plummer, Indiana 47424  
EFI Project Number 98510-05144

Dear Mr. Gelhausen:

EFI Global (EFI) has performed a Phase II Environmental Site Assessment (Phase II) for Citizens Energy Group in accordance with your request and the scope of work outlined in during our May 30, 2013 telephone conversations. The purpose of this investigation was to determine the levels of polynuclear aromatic hydrocarbons (PAHs) and total chloride from two overburden stockpiles. The Phase II investigation involved sampling and testing of stockpiled soil at the site. The attached report provides a summation of the findings of this study.

We trust this submittal is responsive to your needs. If you have any questions or comments regarding this report, or if we can be of further service to you, please do not hesitate to call us at (317) 585-6430.

Sincerely,  
**EFI Global, Inc.**



Scott Verow  
Staff Technician



Patrick Rohan, C.H.M.M.  
Senior Project Manager



Kurtis H. Gilliam, C.H.M.M.  
District Manager

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APPENDIX C – Laboratory Documentation

## EXECUTIVE SUMMARY

Citizens Energy Group (Citizens) retained EFI Global, Inc. (EFI) to perform a Phase II Environmental Site Assessment (Phase II) within a portion of the Plummer Field located at approximately County Road 250 West and County Road 325 South (Site) in the Town of Plummer, Greene County, Indiana. This work was performed in accordance with our May 30, 2013 telephone conversations. The Phase II was conducted to evaluate the level of petroleum hydrocarbons in the stockpiled surficial soil generated from a crude oil-water separator release that occurred on May 28, 2013 within a portion of the Plummer Field. Specifically, the purpose of this investigation was to evaluate the levels of polynuclear aromatic hydrocarbons (PAHs) and total chloride from two overburden stockpiles and soil deposited in two random roll-off boxes prior to disposal. The overburden stockpiles were reportedly created per the Indiana Department of Environmental Management (IDEM) cleanup requirements in response to the crude oil-water separator release.

Prior to the arrival of EFI, Citizens had already removed or “scrapped-off” the top 3-6 inches of top soil where the crude oil and water had previously encompassed. Two (2) overburden soil stockpiles were generated as a result of the previous soil removal activities by Citizens. Upon EFI’s arrival Citizens was in the process of transferring the stockpiled soil to roll-offs and transporting them off-site for disposal.

Overburden pile No. 1 was approximately 6 feet wide x 90 feet long x 2.5 feet in height. Overburden pile No. 2 was approximately 10 feet wide x 112 feet long x 2.5 feet in height. EFI, on behalf of Citizens, collected random soil samples based on the size of each overburden stockpile to determine the level of petroleum hydrocarbon impact within each overburden stockpile prior to being removed by roll-off boxes from the Site. Specifically, based on the hydrocarbon oils range product listed in the IDEM Potential Petroleum Contaminants Table (*Transition to the Remediation Closure Guide Letter* dated September 17, 2012), the soil samples were submitted for polynuclear aromatic hydrocarbons (PAHs). Additionally, soil samples were also submitted for total chloride to determine the relative salinity of the overburden soil.

On May 31, 2013, EFI collected soil samples from the two overburden soil stockpiles and two roll-off boxes. A total of nineteen (19) soil samples (Sample Nos. 1-18 [no Sample No. 6] and RO-1 and RO-2) were collected from the overburden stockpiles and metal roll-off boxes and submitted for laboratory analysis. One duplicate and matrix spike/matrix spike duplicate soil sample was also collected and submitted for laboratory analysis. Each soil sample was also submitted for PAHs, total chlorides, and percent moisture.

On June 12, 2013, EFI returned to the Site in order to obtain background soil samples. Per discussion with Citizens, IDEM had requested that background soil samples be collected and submitted for the appropriate soil analytical parameters. The exact locations of the background soil samples were randomly chosen by Citizens and EFI. EFI collected the background soil samples from the randomly chosen locations.

A total of 7 background soil samples (Sample Nos. 19 – 25) and one duplicate soil sample were collected and submitted for laboratory analysis. Each soil sample was also submitted for PAHs, total chlorides, and percent moisture.

Concentrations of several, adsorbed PAH constituents were detected in each soil sample; however, the PAH concentrations were all below their respective RCG residential direct contact soil screening levels and soil migration to groundwater (MTG) screening levels with the exception of naphthalene that was detected above the soil migration to groundwater MTG screening level of 0.092 mg/kg. Specifically, adsorbed naphthalene was detected above the soil migration to groundwater MTG screening levels in Soil Sample Nos. 7, 20, 21, 22, and 23. The adsorbed naphthalene concentrations ranged from 0.112 mg/kg in Soil Sample No. 20 – 0.139 mg/kg in Soil Sample No. 21.

Adsorbed chloride concentrations were detected in sixteen (16) soil samples; the concentrations ranged from 119 mg/kg (Soil Sample #20) – 419 mg/kg (Soil Sample #7). Adsorbed chloride concentrations were below laboratory reporting limits in Soil Sample Nos. 4, 5, 11, 13, 19, 22, 23, 24, 25 and RO-2.

Currently, there are no adsorbed chloride direct contact soil screening levels listed in the IDEM Remediation Closure Guide, Appendix A: Screening Levels, Table A-6 dated July 9, 2012; however, elemental chloride is stable, highly soluble, and non-toxic and is readily adsorbed by plants. It should be noted that at the time of the soil sampling activities, a heavy and persistent rainfall event had been occurring which may have leached out additional chloride from the soil. Additionally, the initial water table is estimated to be below 80-inches or more.

Based on these laboratory results, it appears that the concentrations of adsorbed PAH constituents and chloride are relatively low and no further remediation of soil appears warranted at this time.

No pooled surface water samples were collected as part of the initial Phase II activities due to persistent and heavy rainfall. The heavy precipitation diluted the pooled surface water; therefore, it was determined that the water samples would no longer provide valid data.

## PHASE II ENVIRONMENTAL SITE ASSESSMENT

Citizens Energy Group  
Highway 157 N  
Worthington, Indiana 47471  
EFI Project Number: 98510-05144

### 1.0 INTRODUCTION

Citizens Energy Group (Citizens) retained EFI Global, Inc. (EFI) to perform a Phase II Environmental Site Assessment (Phase II) within a portion of the Plummer Field located at approximately County Road 250 West and County Road 325 South (Site) in the Town of Plummer, Greene County, Indiana. This work was performed in accordance with our May 30, 2013 telephone conversations. The purposed of the Phase II was to determine the level of petroleum hydrocarbons in the stockpiled surficial soil generated from a release associated with a crude oil-water separator that occurred on May 28, 2013 within a portion of the Plummer Field. **Appendix A** provides an aerial site plan outlining the cleanup area.

## **2.0 BACKGROUND**

Plummer Field is located in Greene County and approximately 70 miles west/southwest of Indianapolis. Citizens has installed and operates oil wells in this area. The crude oil water mixture pumped from the wells is stored at the project site in above ground storage tanks. The mixture is run through a oil-water separator to remove water from the crude oil. The system reportedly over filled on May 28, 2013, breached the secondary containment system and flowed onto the adjacent grass covered field.



### **3.0 SITE DESCRIPTION**

#### **3.1 Physical Description**

The Subject Property is an industrial property located at County Road 250 West and County Road 325 South in the Town of Plummer, Greene County, Indiana. The Subject Property is found within the Scotland, Indiana 7.5-Minute Topographic Quadrangle Map. A vicinity (topographic) map, aerial photograph, and soil sampling map are provided in **Appendix A**.

The Site location, based on the sign at the property entrance, is ROLLISON 3, 7; SEC.8-T6N-R5W. The Site is located on the west side of County Road 250 West and is primarily a grass covered field. The grass bordering the excavated area had been recently mowed. The excavated area is irregularly shaped with an initially wide area narrowing to the southwest “boot shape” and is approximately 250 ft. long by 100 ft. wide.

Approximately, the top four (4) to six (6) inches of grass/top soil had been removed and placed into to two (2) separate overburden piles. The two (2) overburden stockpiles piles were approximately 50 ft. southwest of the southwest corner of the tank farm secondary containment system (four metal vertical tanks within a walled-dike area). The western pile was approximately 90 ft. long and the eastern pile was approximately 112 ft. long. Both overburden piles were approximately 2.5 ft. tall. It should also be noted that nine (9) previously filled metal roll-off boxes were located at the Site. The metal roll-off boxes had been filled with additional excavated grass/top soil. Other roll-off boxes had been filled and sent off-site for disposal prior to EFI’s arrival at the site.

Heavy rainfall was experienced during the site investigation/sample collection activities. The rainwater sheet flow was following the excavation area towards the southwest. A drainage ditch exists just beyond the southern border of the excavated area.

Photographic documentation is provided in **Appendix B**.

### **3.2 Site Geology**

The Site topography consists of relatively flat and gently rolling hills. The Scotland, IN Topographic Map (USGS, 1979) indicates the ground surface has an elevation that ranges from approximately 540 to 550 feet above mean sea level. Regionally the ground surface slopes south towards the White River.

According to the *Web Soil Survey* (Natural Resources Conservation Service, U.S. Department of Agriculture), two soil complexes are located at the Site. Alvin Bloomfield complex/ silt loams (AnB) with a 2 to 6 percent slope occupy approximately 20% of the mapping unit and consist of gently sloping, well drained deep soils on ridge tops, knolls, and side slopes and in dune like areas on uplands and terraces. Roby Sandy Loam (RmA) with 0 to 2 percent slope occupy approximately 80% of the mapping unit and consist of nearly level, deep, somewhat poorly drained on low terraces (NRCS).

The underlying material is estimated to extend to an approximate depth of 50-100 feet of silty, sandy, clay loam with unweathered bedrock located beneath. The depth to water table is estimated to be more than 80 inches (NRCS).

The Wabash Lowland physiographic unit forms the unconsolidated material below the Site. The unconsolidated deposits have a thickness that ranges from approximately 50 -100 feet or less (Gray, 1989). The Wabash Lowland is the southernmost physiographic unit in the basin. This unit is a broad lowland underlain by nonresistant siltstones and shales, which have been eroded by repeated glaciations into a subdued landscape (Fenelon, 1994). The unconsolidated material has a complex and unstratified composition.

Pennsylvanian aged complexly interbedded shale and sandstone, with thin beds of limestone and coal composed of the Racoon Creek and Carbondale Groups and the Shelburn, Patoka, and

Bond Formations of the McLeansboro Group forms the bedrock below the Site (Fenelon, 1994). The surface of the bedrock has an elevation of approximately 440-500 feet above MSL. Regionally the bedrock surface slopes to the south in the study area.

Major hydrogeologic features such as a river or lake generally influence the regional groundwater flow direction. Surface and/or bedrock topography may also influence regional groundwater flow direction. Vicinity groundwater flow is assumed to flow in a southerly direction towards the White River.

Local geologic features may cause local groundwater flow direction to differ from regional flow direction. Local hydraulic gradient at the Site is interpreted based on a review of the USGS Topographic Quadrangle. Estimated groundwater levels and/or flow direction(s) may vary due to seasonal fluctuations in precipitation, local usage demands, geology, underground structures or dewatering operations. A complete hydrogeologic investigation would be necessary to determine actual groundwater flow direction.

## **4.0 FIELD WORK**

The primary object of this project was to collect soil samples for laboratory analysis and generate data concerning the presence of petroleum hydrocarbon impact within the over-excavated soil overburden piles. This study focused on the two overburden stockpiles of surficial soil and two filled roll-off boxes that had been previously generated by Citizens prior to the arrival of EFI.

### **4.1 Random Sampling Procedures**

In order to collect sufficient soil samples to identify areas of contamination or no contamination and estimate/test an area for petroleum hydrocarbons, EFI selected a systematic and grid sampling approach. This approach was chosen from the U.S. EPA Quality System in selecting a sampling design to meet these parameters. Systematic and grid sampling involves using a random number generator (or equivalent process) to select an initial sampling point (either spatial or temporal) and the remaining points are based on a specific pattern (e.g. rectangular). This sampling design can be used for any objective in estimating means/testing, finding elevated concentrations, and estimating spatial or temporal patterns or correlations. It is primarily used for pilot studies, scoping studies, and exploratory studies. It is best used when the item of interest could not possibly be aligned with the sampling pattern; little to no prior information is available; regular spacing makes it easy for field teams to locate sampling points; or when uniform coverage of an area/process is necessary (EPA Quality System, 2008).

Additionally, this pre-determined sampling approach would also be utilized in an attempt to limit bias or subjective sampling from within the overburden stockpiles of soil.

Initially, the dimensions of each overburden stock pile of soil was estimated to be approximately 10 feet in width, 200 feet in length, and 2-3 feet in height. Based on this

sizing information, twenty (20) equidistant rectangular sampling grids were generated within each stockpile area. Each sampling grid was five (5) feet in width and twenty (20) feet in length; hence, creating twenty (20) separate sampling grid locations within each soil stockpile or forty (40) overall sampling grids for both soil stockpiles. Based on the forty (40) separate sampling grid areas, a random number generator was used to create a specific sampling location within the specific grid. The random number generator was programmed to create forty (40) sets of one (1) unique number per set that ranged from 1 to 20 (unsorted). It should be noted that each set correlated to the specific sampling grid (e.g. 1 – 40).

Based on each equidistant sampling grid measurement (5 ft. x 20 ft.), the number generated within each set (e.g. Set #1: 15) signified that in the case of Set #1, a soil sample would be collected 15 feet from the initial starting point measurement (corner of the sampling grid). This procedure would be followed for each subsequent sampling grid location (e.g. Set #2: 12, Set #3: 9, Set #4: 3, etc.). It should be noted that the first overburden stockpile had two (2) sample grid rows: one (1) through ten (10) and eleven (11) through twenty (20). The second overburden stockpile also had two (2) sample grid rows: twenty-one (21) through thirty (30) and thirty-one (31) through forty (40).

#### **4.2 Random Soil Sampling From the Overburden Stockpiles**

An EFI representative initiated fieldwork for this project on May 31, 2013. The field task was to collect soil samples from the two overburden stockpiles from locations determined by the random sampling procedure discussed in the section above.

Upon arrival at the Site, the first task EFI conducted was to determine the actual size of the two overburden stockpiles. The overburden stockpiles were located approximately 50 ft. southwest of the southwest corner of the tank farm secondary containment. For this report, Stockpile 1 is the western pile and Stockpile 2 is the eastern pile. A layout of the overburden stockpiles is presented in the site plan located in **Appendix A**. A handheld measuring wheel was used to measure the length of the stockpiles and to mark the sample grid boundaries and

soil sample locations. Stockpile 1 was approximately 90 ft. long x 6 ft. wide. Stockpile 2 was approximately 112 long x 10 ft. wide. Both stockpiles ranged from 1.5 ft. to 3 ft. in height. Orange flags were placed on the west edge of the both overburden stockpiles to mark off the 20 ft. sampling section grids as had been previously created as part of the systematic sampling grid pattern.

Once the lengths of the stockpiles were measured and the grid pattern marked, then the actual number of samples and sample locations were determined. In the case of Stockpile 1, the first 20 ft. length section was 8 ft. wide and then tapered to 6 ft. in width throughout the remaining length of the overburden stockpile. It was decided that the first 20 ft. section would follow the original sampling grid pattern and one soil sample would be collected from both sides of the pile. The remainder of the Stockpile had 1 sample taken from each 20 ft. grid section. The last section of the stockpile was 10 ft. long (i.e. half of the grid pattern length), so the last sample was taken at half the original distance determined in the sampling grid procedure. Sample locations were marked with orange flags approximately 1 ft. inside the west edge of the pile for soil samples 1 through 5. The flag for soil sample 7 was placed 1 ft. inside the east edge of the pile. No soil sample 6 was collected during the sampling activities due to an inadvertent labeling oversight on the sample jars. A total of six (6) soil samples were collected from Stockpile 1.

After Stockpile 1 was properly marked with orange flags, the locations for the samples in Stockpile 2 were then identified. In the case of Stockpile 2, the width was approximately 10 ft. throughout most of the length of the overburden stockpile. Therefore, the soil samples were collected at the pre-determined locations by the systematic sampling grid pattern. Because the last section of the stockpile was 12 ft. long and 6 ft. wide, only one soil sample was collected. Its location was determined using the same methodology as the last (end) soil sample collected in Stockpile 1. Sample locations were also marked with orange flags approximately 1 ft. inside both edges of the pile for soil samples 8 through 12 and 14 through

18, with the exception of the end sample (sample 13), which was placed inside the west edge. A total of eleven (11) soil samples were collected from Stockpile 2.

Additionally, two soil samples were collected from within the previously filled metal roll-off boxes. Two of the nine metal roll-off boxes were chosen to collect the soil samples. Specifically, one roll-off box was located in the middle of the excavated area and the second roll-off box was located within a row of roll-off boxes. The roll-off box soil samples were labeled RO-1 and RO-2, respectively. Each soil sample was randomly chosen from within the middle of each metal roll-off box. It is our understanding that the excavated overburden (i.e. grass/top soil) loaded into metal roll-off boxes were taken for disposal at a landfill facility.

A total of nineteen (19) soil samples were collected from the overburden stockpiles and metal roll-off boxes. One soil grab sample was collected from each identified sample location. Each soil sample was collected in a 4 oz., unpreserved sample container. Additionally, each soil sample was collected approximately 1 ft. beneath the top of the overburden stockpile. For both stockpiles, each soil sample was also collected approximately 2 ft. inwards from the edge of the pile in its respective location. For the roll-off box soil samples, each soil sample was collected approximately 1 ft. inwards from the edge of roll-off box container and 1 ft. beneath the top surface of the overburden material. Each grab sample was collected by hand using a dedicated sampling glove. One matrix spike/matrix spike duplicate (MS/MSD) soil sample and 1 duplicate soil sample was also collected for QA/QC purposes.

Each soil sample collected for laboratory analysis was placed in the appropriate 4 oz. glass sample container provided by Pace Analytical (Pace) and preserved in a cooler on ice. The collected samples were hand delivered to the Pace laboratory in Indianapolis, IN. Each soil sample was submitted for PAHs and total chlorides.

### **4.3 Subsequent Background Soil Sampling**

On June 12, 2013 an EFI representative returned to the Site and initiated fieldwork to collect background samples. Per discussion with the Citizens, IDEM had requested that background soil samples be collected and submitted for the appropriate soil analytical parameters. Soil samples were collected from several areas west of the spill location. The exact locations were randomly chosen by Citizens and EFI.

A total of seven (7) soil sample locations were chosen from the area west of the spill location. A containment wall of straw bales was placed approximately 75 ft. west of the excavation area. Four of the soil sample locations were between the straw wall and the excavation area; the remaining three soil samples were west of the straw wall. All sample locations were marked with orange flags. A site plan identifying the location of the background soil samples is provided in **Appendix A**.

The samples were collected from a depth of approximately 3-4 inches below the surface. At each specific location, a shovel was used to remove the top layer of soil that was approximately 2 inches in depth. Subsequently, approximately 1-2 inches of soil beneath the top layer was further removed by hand using dedicated sampling gloves. The exposed soil that was approximately 3-4 inches below the surface was collected as the background soil sample. It should be noted that the shovel was decontaminated by distilled water between each sample location.

A total of 7 background soil samples (1 per location) were collected and submitted for laboratory analysis. One additional duplicate soil sample was also collected and submitted for laboratory analysis. Each soil sample collected for laboratory analysis was placed in the appropriate 4 oz. glass sample container provided by Pace and preserved in a cooler on ice.



The collected samples were hand delivered to Pace in Indianapolis, IN. Each soil sample was submitted for PAHs, total chlorides, and percent moisture.

#### **4.4 Decontamination**

For the sampling from the overburden stockpiles, each soil sample was collected by hand using disposable nitrile gloves. After each soil sample was collected, a new pair of nitrile gloves was donned by the EFI sample collector. No other decontamination procedures were used.

For the background soil sampling event, each soil sample was collected by hand using disposable nitrile gloves. A shovel was used to excavate the soil to an approximate 3 inch depth before collecting the sample by hand. The shovel was cleaned between samples by first scraping the dirt off by hand. Next, distilled water was used to wash (distilled water and clean paper towels were used to scrub the surface) of the shovel until no visible dirt remained. Then the shovel was rinsed until the water falling off was clear. A new pair of nitrile gloves was donned by the EFI prior to collecting the next background soil sample.

#### **4.5 Media Disposal**

The disposable sampling gloves and orange marking flags used in the overburden soil sample collection process were disposed with the overburden samples. The disposable sampling gloves used in the background sampling was collected and disposed of properly. The orange flags were left in the field.

## 5.0 LABORATORY ANALYSIS

The laboratory analytical results for the soil samples collected at the Site are discussed in the following sections. The sample results were compared to the IDEM Remediation Closure Guide (RCG) Soil Screening Levels (RCG, Appendix A: Screening Levels, Table A-6, July 9, 2012). Each soil sample was submitted to the Pace laboratory in Indianapolis, IN for PAH using EPA Method 8270 SIM and total chloride using Standard Method 4500-Cl-E, and percent moisture analysis using ASTM D2974-87 Method. The laboratory analytical report is included as **Appendix C**.

### 5.1 Soil Data - PAH

All of the soil samples submitted for analysis from the randomly sampled areas within the two separate overburden stockpiles, roll-off boxes and background soil sampling areas located at the Plummer Field contained relatively low concentrations of PAH compounds.

The concentrations of PAH detected in each soil sample was below their respective residential direct contact soil screening levels. Additionally, each PAH constituent within each soil sample was below the soil migration to groundwater (MTG) screening level with the exception of naphthalene that was detected above the soil migration to groundwater MTG screening level of 0.092 mg/kg. Specifically, adsorbed naphthalene was detected in the soil migration to groundwater MTG screening levels in Soil Sample Nos. 7, 20, 21, 22, and 23. The adsorbed naphthalene concentrations ranged from 0.112 mg/kg in Soil Sample No. 20 – 0.139 mg/kg in Soil Sample No. 21.

A summary of the soil analytical data is provided in **Table 1** in the Tables Section of this report.

## **5.2 Soil Data – Total Chloride**

Chloride ( $\text{Cl}^-$ ) is an essential element for animals and all plants. It is a component of common salt and found in seawater. This must not be confused with other forms of the element such as chlorine gas (highly toxic and unstable), chlorine in swimming pools, hypochlorite (a sterilant and bactericide), hydrochloric acid (corrosive and dangerous liquid), etc. It is important to recognize that none of these forms can occur in soils as the result of the additions of chloride in fertilizers, manures, or rainfall. Chloride is stable, highly soluble, non-toxic and is readily adsorbed by plants (A&L Canada Laboratories, Inc., Revised April 2008).

Adsorbed chloride concentrations were detected in fourteen (16) soil samples; the concentrations ranged from 119 mg/kg (Soil Sample #20) – 419 mg/kg (Soil Sample #7). Adsorbed chloride concentrations were below laboratory reporting limits in Soil Sample Nos. 4, 5, 11, 13, 19, 22, 23, 24, 25 and RO-2.

Currently, there are no adsorbed chloride direct contact soil screening levels listed in the RCG, Appendix A: Screening Levels, Table A-6, July 9, 2012; however, elemental chloride is stable, highly soluble, and non-toxic and is readily adsorbed by plants. Plant species differ considerably in their sensitivity to chloride excess. The sensitivity also varies with the moisture holding capacity of the soil and soil moisture content. The existence of healthy ecosystems in coastal regions of the world, which receive enormous quantities of chloride from rain, has shown that chloride addition is not a problem (A&L Canada Laboratories, Inc., Revised April 2008).

It should be noted that at the time of the soil sampling activities, a heavy and persistent rainfall event had been occurring which may have leached out additional chloride from the soil. Additionally, the initial water table is estimated to be below 80-inches or more.

A summary of the soil analytical data is provided in **Table 1** in the Tables Section of this report.

## **6.0 CONCLUSIONS**

This Phase II included a reconnaissance visit of the Site, collecting soil samples from two (2) overburden soil stockpiles, two (2) metal roll-off boxes and seven (7) separate background sampling locations for laboratory analysis. The purpose of the Phase II was to evaluate the level of petroleum hydrocarbons in the stockpiled surficial soil that was generated from a recent crude oil spill associated with an oil-water separator release that occurred on May 28, 2013 within a portion of the Plummer Field. Background soil samples were also collected for comparative purposes based on previous discussion between Citizens and the IDEM.

Concentrations of several, adsorbed PAH constituents were detected in each soil sample; however, the PAH concentrations were all below their respective RCG residential direct contact soil screening levels and soil MTG screening levels with the exception of naphthalene that was detected above the soil migration to groundwater MTG screening level of 0.092 mg/kg. Specifically, adsorbed naphthalene was detected above the soil migration to groundwater MTG screening levels in Soil Sample Nos. 7, 20, 21, 22, and 23. The adsorbed naphthalene concentrations ranged from 0.112 mg/kg in Soil Sample No. 20 – 0.139 mg/kg in Soil Sample No. 21.

Adsorbed chloride concentrations were detected in fourteen (16) soil samples; the concentrations ranged from 119 mg/kg (Soil Sample #20) – 419 mg/kg (Soil Sample #7). Adsorbed chloride concentrations were below laboratory reporting limits in Soil Sample Nos. 4, 5, 11, 13, 19, 22, 23, 24, 25 and RO-2.

Currently, there are no adsorbed chloride direct contact soil screening levels listed in the RCG, Appendix A: Screening Levels, Table A-6, July 9, 2012; however, elemental chloride is stable, highly soluble, and non-toxic and is readily adsorbed by plants. It should be noted that at the time of the soil sampling activities, a heavy and persistent rainfall event had been

occurring which may have leached out additional chloride from the soil. Additionally, the initial water table is estimated to be below 80-inches or more.

Based on these laboratory results, it appears that the concentrations of adsorbed PAH constituents and chloride are relatively low and no further remediation of soil appears warranted at this time.

## **7.0 QUALIFICATIONS**

This report has been prepared to aid Citizens in determining the petroleum hydrocarbon levels in the two (2) overburden soil stockpiles, two (2) metal roll-off boxes, and seven (7) separate background locations at the Site. This report is prepared for the sole benefit of Citizens and may not be relied upon by any other person or entity without the written authorization of EFI.

The preliminary subsurface evaluation was intended to evaluate the general shallow subsurface conditions, and is based on limited and selected sampling locations. Significant variations in the subsurface conditions may be present in areas not sampled. Additional investigations would be necessary to evaluate the extent and magnitude of any soil and groundwater contamination present.

This report and all field data and notes were gathered and/or prepared by EFI in accordance with the agreed upon scope of work and generally accepted engineering and scientific practices in effect at the time of EFI's assessment. The statements, conclusions, and opinions contained in this report are only intended to give approximations of the environmental conditions at the Subject Property. Moreover, there are several points to note, as follows:

1. Environmental regulations continually change, as do the enforcement priorities of the applicable government agencies involved.
2. It is often difficult and sometimes impossible to accurately estimate the cost that may be involved in remediating the issues. The legal and technological standard initially applied at the agency level for evaluating and remediating environmental issues can be dependent upon the agency official involved.
3. There is always a possibility that sources of future environmental liability have yet to manifest themselves to the point where they are reasonably identifiable through a reasonable external investigation such as the one conducted herein.

The conclusions and recommendations presented in this report describe only the conditions present at the time of the study, in the areas that were assessed. The scope of this report is limited to matters expressly covered.

## **8.0 REFERENCES**

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## **TABLES**

Table 1  
Summary of Soil Analytical Results  
Plummer Field  
Citizens Energy Group  
County Road 250 West and County Road 325 South  
Plummer, IN  
EFI Project # 98510-05144

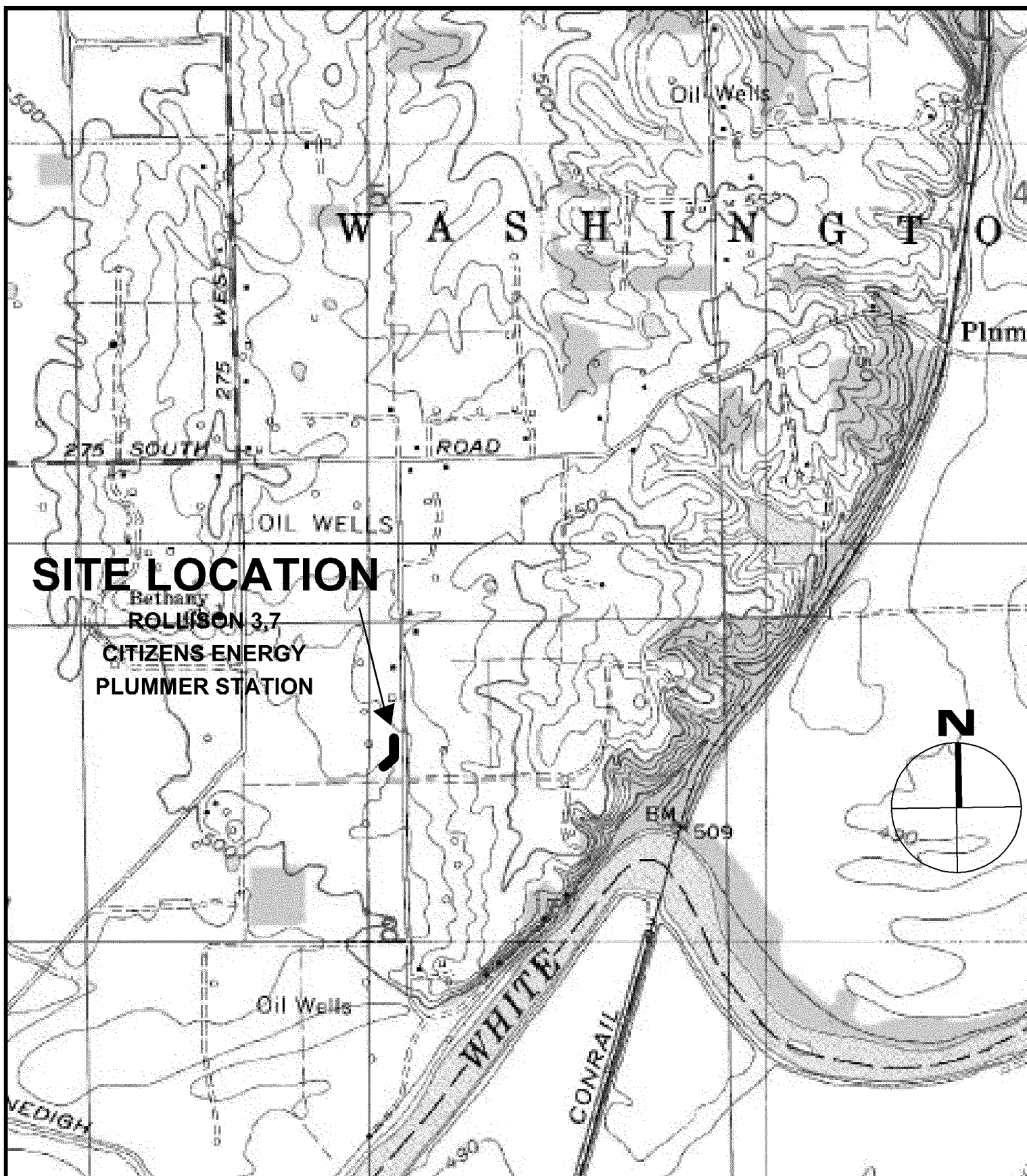
Sample Number	Sample Date	Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method 8270 by SIM (ppm)																		Chloride by SM 4500-Cl-E
		Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene	Chloride
Soil Exposure - Direct Contact - Residential		4,800	N/A	24,000	2.1	0.21	2.1	N/A	21	210	0.21	3,200	3,200	2.1	310	370	50	N/A	2,400	N/A
Soil Exposure - Direct Contact - Com/Ind		33,000	N/A	100,000	21	2.1	21	N/A	210	2,100	2.1	22,000	22,000	21	390	370	180	N/A	17,000	N/A
Soil Exposure - Direct Contact - Excavation		55,000	N/A	100,000	1,300	130	1,300	N/A	13,000	100,000	130	37,000	37,000	1,300	390	370	1,000	N/A	28,000	N/A
Ground Water - Soil MTG - Residential		82	N/A	860	2.1	4.7	7	N/A	68	210	2.2	1,400	81	23	1	2.8	0.092	N/A	190	N/A
Oil Spill Area Soil Sampling																				
1	05/31/13	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	0.0668	<0.333	0.0343	0.274	<0.333	0.0649	0.049	<0.333	0.517	0.0592	218
2	05/31/13	0.0176	<0.0065	<0.0065	<0.0065	0.0075	0.0102	<0.0065	<0.0065	0.0387	<0.0065	0.0235	0.184	<0.0065	0.063	0.0495	0.0125	0.307	0.0366	335
3	05/31/13	0.0091	<0.0062	<0.0062	<0.0062	<0.0062	<0.0062	<0.0062	<0.0062	0.0158	<0.0062	0.0087	0.0784	<0.0062	0.0451	0.0386	0.0082	0.148	0.0155	144
4	05/31/13	0.0173	<0.0069	0.0108	<0.0069	<0.0069	0.0076	<0.0069	<0.0069	0.0188	<0.0069	0.0147	0.123	<0.0069	0.110	0.0808	0.0368	0.180	0.0193	<138
5	05/31/13	0.0082	<0.0062	<0.0062	0.0096	0.0073	0.0074	<0.0062	0.0067	0.0174	<0.0062	0.0317	0.0779	<.0062	0.052	0.0392	0.0072	0.125	0.0307	<125
7	05/31/13	0.0805	<0.0338	<0.0338	<0.0338	<0.0338	<0.0338	<0.0338	<0.0338	0.142	<0.0338	0.0654	0.765	<0.0338	0.262	0.130	<0.0338	1.320	0.120	419
8	05/31/13	0.0168	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	0.0281	<0.0064	0.0117	0.150	<0.0064	0.0821	0.0694	0.0126	0.277	0.0245	185
9	05/31/13	0.117	<0.0329	<0.0329	<0.0329	<0.0329	<0.0329	<0.0329	<0.0329	0.145	<0.0329	0.0832	0.953	<0.0329	0.785	0.629	<b>0.120</b>	1.570	0.135	187
10	05/31/13	0.233	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	0.0313	<0.0064	0.0171	0.199	<0.0064	0.144	0.143	0.031	0.346	0.030	169
11	05/31/13	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	0.010	0.0144	<0.0061	0.0138	0.0105	<0.0061	0.030	0.0089	<122
12	05/31/13	0.0074	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	0.0145	<0.0064	0.0145	0.0716	<0.0064	0.0505	0.0558	0.0097	0.132	0.0174	165
13	05/31/13	0.0065	<0.0059	0.007	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	0.0178	<0.0059	0.0129	0.0652	<0.0059	0.0337	0.0361	<0.0059	0.146	0.018	<119
14	05/31/13	0.0147	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	0.0216	<0.0064	0.0101	0.131	<0.0064	0.0765	0.0762	0.0156	0.237	0.020	405
Duplicate	05/31/13	<0.0326	<0.0326	<0.0326	<0.0326	<0.0326	<0.0326	<0.0326	<0.0326	0.0454	<0.0326	<0.0326	0.284	<0.0326	0.177	0.147	0.0335	0.484	0.0395	328
	15	05/31/13	<0.0063	0.012	0.0088	0.0107	0.0092	0.011	0.0071	0.0098	0.0232	<0.0063	0.0189	0.0547	<0.0063	0.0196	0.0212	<0.0063	0.127	0.0213
16	05/31/13	0.0144	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	0.0224	<0.0064	0.011	0.132	<0.0064	0.0661	0.0693	0.011	0.2390	0.0201	254
17	05/31/13	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	0.0093	<0.0066	<0.0066	0.0509	<0.0066	0.0256	0.024	0.0079	0.0919	0.0101	293
18	05/31/13	0.010	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	<0.0066	0.0165	<0.0066	0.0077	0.0852	<0.0066	0.0547	0.0646	0.011	0.162	0.0144	232
RO1	05/31/13	0.0102	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	0.0137	<0.0064	0.008	0.0855	<0.0064	0.0616	0.0486	0.0101	0.140	0.0133	253
RO2	05/31/13	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	0.011	<0.0065	<0.0065	0.0601	<0.0065	0.037	0.0391	0.0065	0.114	0.0106	<129
Background Area Soil Sampling																				
19	06/12/13	0.104	<0.0287	<0.0287	<0.0287	<0.0287	<0.0287	<0.0287	<0.0287	0.148	<0.0287	0.0654	0.880	<0.0287	0.491	0.147	0.0712	1.130	0.121	<115
20	06/12/13	0.131	<0.0294	<0.0294	<0.0294	<0.0294	<0.0294	<0.0294	<0.0294	0.176	<0.0294	0.077	1.180	<0.0294	0.786	0.290	<b>0.112</b>	1.770	0.143	119
21	06/12/13	0.0802	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	<0.029	0.149	<0.029	0.0658	0.756	<0.029	0.279	<0.029	<b>0.139</b>	0.960	0.119	184
22	06/12/13	0.122	<0.0292	<0.0292	<0.0292	<0.0292	<0.0292	<0.0292	<0.0292	0.162	<0.0292	0.0723	1.130	<0.0292	0.807	0.554	<b>0.137</b>	1.690	0.129	<117
Duplicate	06/12/13	0.0389	<0.0286	<0.0286	<0.0286	<0.0286	<0.0286	<0.0286	<0.0286	0.0603	<0.0286	0.0336	0.346	<0.0286	0.189	0.0539	0.0457	0.543	0.0511	<115
	23	06/12/13	0.0712	<0.0286	<0.0286	<0.0286	<0.0286	<0.0286	<0.0286	0.101	<0.0286	0.0503	0.673	<0.0286	0.505	0.642	<b>0.134</b>	1.040	0.0861	<115
24	06/12/13	0.0468	<0.0292	<0.0292	<0.0292	<0.0292	<0.0292	<0.0292	<0.0292	0.0763	<0.0292	0.0448	0.420	<0.0292	0.241	0.0828	0.0576	0.652	0.0655	<118
25	06/12/13	0.0533	<0.0283	<0.0283	<0.0283	<0.0283	<0.0283	<0.0283	<0.0283	0.0761	<0.0283	0.0361	0.486	<0.0283	0.323	0.0865	0.0561	0.758	0.062	<114

Notes:

- Samples collected on 05/31/13 are from the area of the oil spill.
- Samples collected on 06/12/13 are background samples.
- Concentrations in **Bold Blue** meet or exceed the July 9, 2012 IDEM Remediation Program "Soil Exposure - Direct Contact - Residential" levels.
- Concentrations in **Bold Italics** meet or exceed the July 9, 2012 IDEM Remediation Program "Soil Exposure - Direct Contact - Com/Ind Soil" levels.
- Concentrations in *Italics* meet or exceed the July 9, 2012 IDEM Remediation Program "Soil Exposure - Direct Contact - Excavation" levels.
- Concentrations in **Bold** meet or exceed the July 9, 2012 Remediation Program "Ground Water - Soil MTG - Residential" levels.

**APPENDIX A**

**SITE PLANS AND FIGURES**



## TOPOGRAPHICAL MAP

CITIZENS ENERGY  
COUNTY ROAD 250 WEST AND  
COUNTY ROAD 325 SOUTH  
PLUMMER, IN

Project Number:  
98510-05144

Drawing File:  
TOPO MAP

Date:  
06/07/13

Scale:

Drn. By:  
SWV

Ckd. By:

App'd By:

**EFI**  
**Global**  
Complex Issues • Solid Solutions

Figure:

**1**

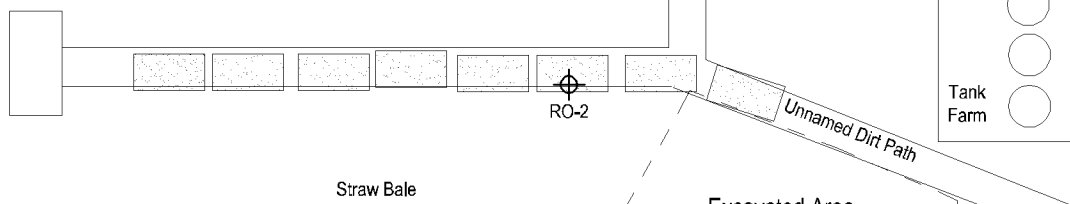
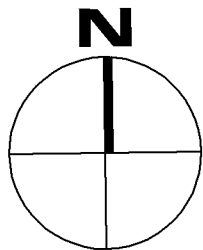
↑  
N



**Figure 2**  
**Site Plan**

**Citizens Energy**  
Plummer Field  
County Road 250 West and  
County Road 325 South  
Plummer, IN

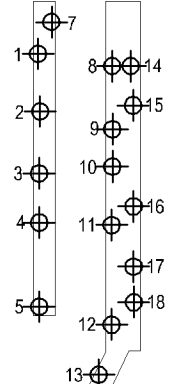
**EFI Project Number:**  
98510-05144



Straw Bale  
Retention Wall

Excavated Area

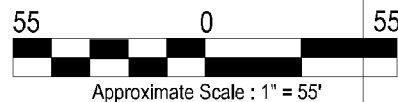
Stockpile 1 Stockpile 2



Excavated Area

#### LEGEND

- Approximate boundary of excavated overburden.
- ⊕ Overburden stockpile soil sample (Samples collected 05-31-13).
- RO-1 Overburden soil sample collected from roll-off box (Samples collected 05-31-13).
- Background soil sample (Samples collected 06-12-13).
- ▨ Metal roll-off box.



County Road 250 West

## PLUMMER FIELD SOIL SAMPLING MAP

CITIZENS ENERGY  
COUNTY ROAD 250 WEST AND  
COUNTY ROAD 325 SOUTH  
PLUMMER, IN

Project Number:  
98510-05144

Drawing File:  
SOIL SAMPLING

Date:  
06-17-13

Scale:  
As Shown

Drn. By:  
SWV

Ckd. By:

App'd By:



Figure:

3

**APPENDIX B**

**PHOTOGRAPHIC DOCUMENTATION**



## Photographs



1. Citizens Energy Plummer Field Station.



2. Tank farm from which leak occurred.



3. Southwest corner of tank farm where leak occurred.



4. Excavation area facing south toward overburden piles.



5. Excavation area facing south toward roll-off box and location of sample RO-1.



6. Excavation area facing north.



## Photographs



7. East side overburden stock pile.



8. West side overburden stock pile.



9. Orange flags within the stock piles represent the sample locations.



10. Roll-off boxes on the north edge containing excavated material.

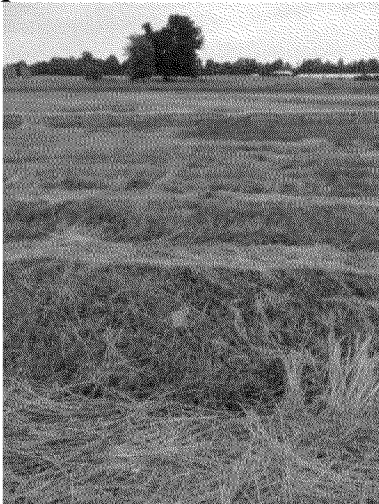


11. Background sample area located west of the previously excavated area.



12. Orange flags represent the background soil sample locations.

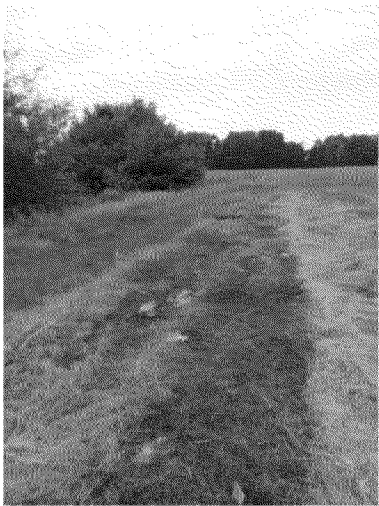
## Photographs



13. Flag marking sample location.



14. Background sample location facing east. This is the spillway where runoff ran.



15. Spillway facing west.



16. West edge of straw bale retention wall.



17. South edge of straw bale retention wall next to drainage ditch.



18. Tree is the eastern edge of the excavation.

**APPENDIX C**

**LABORATORY DOCUMENTATION**

June 12, 2013

Mr. Scott Verow  
EFI Global, Inc.  
8091 Center Run Drive  
Suite 191  
Indianapolis, IN 46250

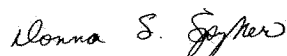
RE: Project: Citizens Energy Group  
Pace Project No.: 5081252

Dear Mr. Verow:

Enclosed are the analytical results for sample(s) received by the laboratory on May 31, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Donna Spyker

donna.spyker@pacelabs.com  
Project Manager

Enclosures



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: Citizens Energy Group

Pace Project No.: 5081252

---

### Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268

Illinois Certification #: 200074

Indiana Certification #: C-49-06

Kansas Certification #: E-10247

Kentucky Certification #: 0042

Louisiana/NELAC Certification #: 04076

Ohio VAP Certification #: 101170-0

Pennsylvania Certification #: 68-04991

West Virginia Certification #: 330

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## SAMPLE SUMMARY

Project: Citizens Energy Group  
Pace Project No.: 5081252

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5081252001	1	Solid	05/31/13 07:30	05/31/13 12:08
5081252002	2	Solid	05/31/13 07:40	05/31/13 12:08
5081252003	3	Solid	05/31/13 07:50	05/31/13 12:08
5081252004	4	Solid	05/31/13 08:00	05/31/13 12:08
5081252005	5	Solid	05/31/13 08:10	05/31/13 12:08
5081252006	7	Solid	05/31/13 08:30	05/31/13 12:08
5081252007	8	Solid	05/31/13 08:40	05/31/13 12:08
5081252008	9	Solid	05/31/13 08:50	05/31/13 12:08
5081252009	10	Solid	05/31/13 09:00	05/31/13 12:08
5081252010	11	Solid	05/31/13 09:10	05/31/13 12:08
5081252011	12	Solid	05/31/13 09:20	05/31/13 12:08
5081252012	13	Solid	05/31/13 09:30	05/31/13 12:08
5081252013	14	Solid	05/31/13 09:40	05/31/13 12:08
5081252014	15	Solid	05/31/13 09:45	05/31/13 12:08
5081252015	16	Solid	05/31/13 09:15	05/31/13 12:08
5081252016	17	Solid	05/31/13 09:25	05/31/13 12:08
5081252017	18	Solid	05/31/13 09:05	05/31/13 12:08
5081252018	R01	Solid	05/31/13 09:35	05/31/13 12:08
5081252019	R02	Solid	05/31/13 09:38	05/31/13 12:08
5081252020	DUP	Solid	05/31/13 08:00	05/31/13 12:08

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: Citizens Energy Group  
Pace Project No.: 5081252

Lab ID	Sample ID	Method	Analysts	Analytes Reported
5081252001	1	EPA 8270 by SIM	CEM	20
		ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
5081252002	2	EPA 8270 by SIM	CEM	20
		ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
5081252003	3	EPA 8270 by SIM	CEM	20
		ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
5081252004	4	EPA 8270 by SIM	CEM	20
		ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
5081252005	5	EPA 8270 by SIM	CEM	20
		ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
5081252006	7	EPA 8270 by SIM	CEM	20
		ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
5081252007	8	EPA 8270 by SIM	CEM	20
		ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
5081252008	9	EPA 8270 by SIM	CEM	20
		ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
5081252009	10	EPA 8270 by SIM	CEM	20
		ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
5081252010	11	EPA 8270 by SIM	CEM	20
		ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
5081252011	12	EPA 8270 by SIM	CEM	20
		ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
5081252012	13	EPA 8270 by SIM	CEM	20
		ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
5081252013	14	EPA 8270 by SIM	CEM	20

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## SAMPLE ANALYTE COUNT

Project: Citizens Energy Group  
Pace Project No.: 5081252

Lab ID	Sample ID	Method	Analysts	Analytes Reported
5081252014	15	ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
		EPA 8270 by SIM	CEM	20
5081252015	16	ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
		EPA 8270 by SIM	CEM	20
5081252016	17	ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
		EPA 8270 by SIM	CEM	20
5081252017	18	ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
		EPA 8270 by SIM	CEM	20
5081252018	R01	ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
		EPA 8270 by SIM	CEM	20
5081252019	R02	ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
		EPA 8270 by SIM	CEM	20
5081252020	DUP	ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
		EPA 8270 by SIM	CEM	20

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## ANALYTICAL RESULTS

Project: Citizens Energy Group  
Pace Project No.: 5081252

**Sample: 1**      **Lab ID: 5081252001**      Collected: 05/31/13 07:30      Received: 05/31/13 12:08      Matrix: Solid

### Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b> Analytical Method: EPA 8270 by SIM      Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	33.3	5	06/05/13 13:35	06/06/13 15:35	83-32-9	
Acenaphthylene	ND	ug/kg	33.3	5	06/05/13 13:35	06/06/13 15:35	208-96-8	
Anthracene	ND	ug/kg	33.3	5	06/05/13 13:35	06/06/13 15:35	120-12-7	
Benzo(a)anthracene	ND	ug/kg	33.3	5	06/05/13 13:35	06/06/13 15:35	56-55-3	
Benzo(a)pyrene	ND	ug/kg	33.3	5	06/05/13 13:35	06/06/13 15:35	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	33.3	5	06/05/13 13:35	06/06/13 15:35	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	33.3	5	06/05/13 13:35	06/06/13 15:35	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	33.3	5	06/05/13 13:35	06/06/13 15:35	207-08-9	
Chrysene	66.8	ug/kg	33.3	5	06/05/13 13:35	06/06/13 15:35	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	33.3	5	06/05/13 13:35	06/06/13 15:35	53-70-3	
Fluoranthene	34.3	ug/kg	33.3	5	06/05/13 13:35	06/06/13 15:35	206-44-0	
Fluorene	274	ug/kg	33.3	5	06/05/13 13:35	06/06/13 15:35	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	33.3	5	06/05/13 13:35	06/06/13 15:35	193-39-5	
1-Methylnaphthalene	64.9	ug/kg	33.3	5	06/05/13 13:35	06/06/13 15:35	90-12-0	N2
2-Methylnaphthalene	49.0	ug/kg	33.3	5	06/05/13 13:35	06/06/13 15:35	91-57-6	
Naphthalene	ND	ug/kg	33.3	5	06/05/13 13:35	06/06/13 15:35	91-20-3	1d
Phenanthrene	517	ug/kg	33.3	5	06/05/13 13:35	06/06/13 15:35	85-01-8	
Pyrene	59.2	ug/kg	33.3	5	06/05/13 13:35	06/06/13 15:35	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	72	%	38-110	5	06/05/13 13:35	06/06/13 15:35	321-60-8	
p-Terphenyl-d14 (S)	67	%	32-111	5	06/05/13 13:35	06/06/13 15:35	1718-51-0	

### Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture	25.2	%	0.10	1		06/06/13 15:52
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### 4500 Chloride in Soil

Analytical Method: SM 4500-Cl-E      Preparation Method: SM 4500-Cl-E

Chloride	218	mg/kg	133	1	06/06/13 09:12	06/10/13 11:37	16887-00-6
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## ANALYTICAL RESULTS

Project: Citizens Energy Group  
Pace Project No.: 5081252

Sample: 2 Lab ID: 5081252002 Collected: 05/31/13 07:40 Received: 05/31/13 12:08 Matrix: Solid

### Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b> Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	17.6	ug/kg	6.5	1	06/05/13 13:35	06/06/13 15:53	83-32-9	
Acenaphthylene	ND	ug/kg	6.5	1	06/05/13 13:35	06/06/13 15:53	208-96-8	
Anthracene	ND	ug/kg	6.5	1	06/05/13 13:35	06/06/13 15:53	120-12-7	
Benzo(a)anthracene	ND	ug/kg	6.5	1	06/05/13 13:35	06/06/13 15:53	56-55-3	
Benzo(a)pyrene	7.5	ug/kg	6.5	1	06/05/13 13:35	06/06/13 15:53	50-32-8	
Benzo(b)fluoranthene	10.2	ug/kg	6.5	1	06/05/13 13:35	06/06/13 15:53	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	6.5	1	06/05/13 13:35	06/06/13 15:53	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	6.5	1	06/05/13 13:35	06/06/13 15:53	207-08-9	
Chrysene	38.7	ug/kg	6.5	1	06/05/13 13:35	06/06/13 15:53	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	6.5	1	06/05/13 13:35	06/06/13 15:53	53-70-3	
Fluoranthene	23.5	ug/kg	6.5	1	06/05/13 13:35	06/06/13 15:53	206-44-0	
Fluorene	184	ug/kg	6.5	1	06/05/13 13:35	06/06/13 15:53	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	6.5	1	06/05/13 13:35	06/06/13 15:53	193-39-5	
1-Methylnaphthalene	63.0	ug/kg	6.5	1	06/05/13 13:35	06/06/13 15:53	90-12-0	N2
2-Methylnaphthalene	49.5	ug/kg	6.5	1	06/05/13 13:35	06/06/13 15:53	91-57-6	
Naphthalene	12.5	ug/kg	6.5	1	06/05/13 13:35	06/06/13 15:53	91-20-3	
Phenanthrene	307	ug/kg	6.5	1	06/05/13 13:35	06/06/13 15:53	85-01-8	
Pyrene	36.6	ug/kg	6.5	1	06/05/13 13:35	06/06/13 15:53	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	61	%	38-110	1	06/05/13 13:35	06/06/13 15:53	321-60-8	
p-Terphenyl-d14 (S)	58	%	32-111	1	06/05/13 13:35	06/06/13 15:53	1718-51-0	

### Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture	23.7	%	0.10	1		06/06/13 15:52
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### 4500 Chloride in Soil

Analytical Method: SM 4500-Cl-E Preparation Method: SM 4500-Cl-E

Chloride	335	mg/kg	131	1	06/06/13 09:12	06/10/13 11:38	16887-00-6
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## ANALYTICAL RESULTS

Project: Citizens Energy Group  
Pace Project No.: 5081252

**Sample: 3**      **Lab ID: 5081252003**      Collected: 05/31/13 07:50      Received: 05/31/13 12:08      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b> Analytical Method: EPA 8270 by SIM      Preparation Method: EPA 3546								
Acenaphthene	9.1	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:11	83-32-9	
Acenaphthylene	ND	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:11	208-96-8	
Anthracene	ND	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:11	120-12-7	
Benzo(a)anthracene	ND	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:11	56-55-3	
Benzo(a)pyrene	ND	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:11	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:11	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:11	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:11	207-08-9	
Chrysene	15.8	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:11	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:11	53-70-3	
Fluoranthene	8.7	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:11	206-44-0	
Fluorene	78.4	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:11	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:11	193-39-5	
1-Methylnaphthalene	45.1	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:11	90-12-0	N2
2-Methylnaphthalene	38.6	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:11	91-57-6	
Naphthalene	8.2	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:11	91-20-3	
Phenanthrene	148	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:11	85-01-8	
Pyrene	15.5	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:11	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	67 %		38-110	1	06/05/13 13:35	06/06/13 16:11	321-60-8	
p-Terphenyl-d14 (S)	65 %		32-111	1	06/05/13 13:35	06/06/13 16:11	1718-51-0	

**Percent Moisture**

Analytical Method: ASTM D2974-87

Percent Moisture	19.0 %	0.10	1	06/06/13 15:52
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**4500 Chloride in Soil**

Analytical Method: SM 4500-Cl-E      Preparation Method: SM 4500-Cl-E

Chloride	144 mg/kg	123	1	06/06/13 09:12	06/10/13 11:39	16887-00-6
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## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Citizens Energy Group  
Pace Project No.: 5081252

Sample: 4 Lab ID: 5081252004 Collected: 05/31/13 08:00 Received: 05/31/13 12:08 Matrix: Solid

### Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b> Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	17.3	ug/kg	6.9	1	06/05/13 13:35	06/06/13 16:29	83-32-9	
Acenaphthylene	ND	ug/kg	6.9	1	06/05/13 13:35	06/06/13 16:29	208-96-8	
Anthracene	10.8	ug/kg	6.9	1	06/05/13 13:35	06/06/13 16:29	120-12-7	
Benzo(a)anthracene	ND	ug/kg	6.9	1	06/05/13 13:35	06/06/13 16:29	56-55-3	
Benzo(a)pyrene	ND	ug/kg	6.9	1	06/05/13 13:35	06/06/13 16:29	50-32-8	
Benzo(b)fluoranthene	7.6	ug/kg	6.9	1	06/05/13 13:35	06/06/13 16:29	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	6.9	1	06/05/13 13:35	06/06/13 16:29	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	6.9	1	06/05/13 13:35	06/06/13 16:29	207-08-9	
Chrysene	18.8	ug/kg	6.9	1	06/05/13 13:35	06/06/13 16:29	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	6.9	1	06/05/13 13:35	06/06/13 16:29	53-70-3	
Fluoranthene	14.7	ug/kg	6.9	1	06/05/13 13:35	06/06/13 16:29	206-44-0	
Fluorene	123	ug/kg	6.9	1	06/05/13 13:35	06/06/13 16:29	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	6.9	1	06/05/13 13:35	06/06/13 16:29	193-39-5	
1-Methylnaphthalene	110	ug/kg	6.9	1	06/05/13 13:35	06/06/13 16:29	90-12-0	N2
2-Methylnaphthalene	80.8	ug/kg	6.9	1	06/05/13 13:35	06/06/13 16:29	91-57-6	
Naphthalene	36.8	ug/kg	6.9	1	06/05/13 13:35	06/06/13 16:29	91-20-3	
Phenanthrene	180	ug/kg	6.9	1	06/05/13 13:35	06/06/13 16:29	85-01-8	
Pyrene	19.3	ug/kg	6.9	1	06/05/13 13:35	06/06/13 16:29	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	54	%	38-110	1	06/05/13 13:35	06/06/13 16:29	321-60-8	
p-Terphenyl-d14 (S)	42	%	32-111	1	06/05/13 13:35	06/06/13 16:29	1718-51-0	

### Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture	27.6	%	0.10	1		06/06/13 15:53
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### 4500 Chloride in Soil

Analytical Method: SM 4500-Cl-E Preparation Method: SM 4500-Cl-E

Chloride	ND	mg/kg	138	1	06/06/13 09:12	06/10/13 11:40	16887-00-6
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## ANALYTICAL RESULTS

Project: Citizens Energy Group  
Pace Project No.: 5081252

Sample: 5 Lab ID: 5081252005 Collected: 05/31/13 08:10 Received: 05/31/13 12:08 Matrix: Solid

### Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Acenaphthene	8.2	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:47	83-32-9	
Acenaphthylene	ND	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:47	208-96-8	
Anthracene	ND	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:47	120-12-7	
Benzo(a)anthracene	9.6	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:47	56-55-3	
Benzo(a)pyrene	7.3	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:47	50-32-8	
Benzo(b)fluoranthene	7.4	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:47	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:47	191-24-2	
Benzo(k)fluoranthene	6.7	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:47	207-08-9	
Chrysene	17.4	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:47	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:47	53-70-3	
Fluoranthene	31.7	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:47	206-44-0	
Fluorene	77.9	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:47	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:47	193-39-5	
1-Methylnaphthalene	52.0	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:47	90-12-0	N2
2-Methylnaphthalene	39.2	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:47	91-57-6	
Naphthalene	7.2	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:47	91-20-3	
Phenanthrene	125	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:47	85-01-8	
Pyrene	30.7	ug/kg	6.2	1	06/05/13 13:35	06/06/13 16:47	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	52	%	38-110	1	06/05/13 13:35	06/06/13 16:47	321-60-8	
p-Terphenyl-d14 (S)	58	%	32-111	1	06/05/13 13:35	06/06/13 16:47	1718-51-0	

### Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture 20.4 % 0.10 1 06/06/13 15:53

### 4500 Chloride in Soil

Analytical Method: SM 4500-Cl-E Preparation Method: SM 4500-Cl-E

Chloride ND mg/kg 125 1 06/06/13 09:12 06/10/13 11:41 16887-00-6

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## ANALYTICAL RESULTS

Project: Citizens Energy Group  
Pace Project No.: 5081252

**Sample: 7**      **Lab ID: 5081252006**      Collected: 05/31/13 08:30      Received: 05/31/13 12:08      Matrix: Solid

### Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b> Analytical Method: EPA 8270 by SIM      Preparation Method: EPA 3546								
Acenaphthene	80.5	ug/kg	33.8	5	06/05/13 13:35	06/06/13 17:05	83-32-9	
Acenaphthylene	ND	ug/kg	33.8	5	06/05/13 13:35	06/06/13 17:05	208-96-8	
Anthracene	ND	ug/kg	33.8	5	06/05/13 13:35	06/06/13 17:05	120-12-7	
Benzo(a)anthracene	ND	ug/kg	33.8	5	06/05/13 13:35	06/06/13 17:05	56-55-3	
Benzo(a)pyrene	ND	ug/kg	33.8	5	06/05/13 13:35	06/06/13 17:05	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	33.8	5	06/05/13 13:35	06/06/13 17:05	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	33.8	5	06/05/13 13:35	06/06/13 17:05	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	33.8	5	06/05/13 13:35	06/06/13 17:05	207-08-9	
Chrysene	142	ug/kg	33.8	5	06/05/13 13:35	06/06/13 17:05	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	33.8	5	06/05/13 13:35	06/06/13 17:05	53-70-3	
Fluoranthene	65.4	ug/kg	33.8	5	06/05/13 13:35	06/06/13 17:05	206-44-0	
Fluorene	765	ug/kg	33.8	5	06/05/13 13:35	06/06/13 17:05	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	33.8	5	06/05/13 13:35	06/06/13 17:05	193-39-5	
1-Methylnaphthalene	262	ug/kg	33.8	5	06/05/13 13:35	06/06/13 17:05	90-12-0	N2
2-Methylnaphthalene	130	ug/kg	33.8	5	06/05/13 13:35	06/06/13 17:05	91-57-6	
Naphthalene	ND	ug/kg	33.8	5	06/05/13 13:35	06/06/13 17:05	91-20-3	1d
Phenanthrene	1320	ug/kg	33.8	5	06/05/13 13:35	06/06/13 17:05	85-01-8	
Pyrene	120	ug/kg	33.8	5	06/05/13 13:35	06/06/13 17:05	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	67	%	38-110	5	06/05/13 13:35	06/06/13 17:05	321-60-8	
p-Terphenyl-d14 (S)	74	%	32-111	5	06/05/13 13:35	06/06/13 17:05	1718-51-0	

### Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture      **26.1** %      0.10      1      06/06/13 15:54

### 4500 Chloride in Soil

Analytical Method: SM 4500-Cl-E      Preparation Method: SM 4500-Cl-E

Chloride      **419** mg/kg      135      1      06/06/13 09:12      06/10/13 11:41      16887-00-6

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## ANALYTICAL RESULTS

Project: Citizens Energy Group  
Pace Project No.: 5081252

**Sample: 8**      **Lab ID: 5081252007**      Collected: 05/31/13 08:40      Received: 05/31/13 12:08      Matrix: Solid

### Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM    Preparation Method: EPA 3546						
Acenaphthene	16.8	ug/kg	6.4	1	06/05/13 13:35	06/06/13 17:23	83-32-9	
Acenaphthylene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 17:23	208-96-8	
Anthracene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 17:23	120-12-7	
Benzo(a)anthracene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 17:23	56-55-3	
Benzo(a)pyrene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 17:23	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 17:23	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 17:23	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 17:23	207-08-9	
Chrysene	28.1	ug/kg	6.4	1	06/05/13 13:35	06/06/13 17:23	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 17:23	53-70-3	
Fluoranthene	11.7	ug/kg	6.4	1	06/05/13 13:35	06/06/13 17:23	206-44-0	
Fluorene	150	ug/kg	6.4	1	06/05/13 13:35	06/06/13 17:23	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 17:23	193-39-5	
1-Methylnaphthalene	82.1	ug/kg	6.4	1	06/05/13 13:35	06/06/13 17:23	90-12-0	N2
2-Methylnaphthalene	69.4	ug/kg	6.4	1	06/05/13 13:35	06/06/13 17:23	91-57-6	
Naphthalene	12.6	ug/kg	6.4	1	06/05/13 13:35	06/06/13 17:23	91-20-3	
Phenanthrene	277	ug/kg	6.4	1	06/05/13 13:35	06/06/13 17:23	85-01-8	
Pyrene	24.5	ug/kg	6.4	1	06/05/13 13:35	06/06/13 17:23	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	46	%	38-110	1	06/05/13 13:35	06/06/13 17:23	321-60-8	
p-Terphenyl-d14 (S)	44	%	32-111	1	06/05/13 13:35	06/06/13 17:23	1718-51-0	

### Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture	21.9	%	0.10	1		06/06/13 15:54
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### 4500 Chloride in Soil

Analytical Method: SM 4500-Cl-E    Preparation Method: SM 4500-Cl-E

Chloride	185	mg/kg	128	1	06/06/13 09:12	06/10/13 11:42	16887-00-6
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## ANALYTICAL RESULTS

Project: Citizens Energy Group  
Pace Project No.: 5081252

**Sample: 9**      **Lab ID: 5081252008**      Collected: 05/31/13 08:50      Received: 05/31/13 12:08      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b> Analytical Method: EPA 8270 by SIM      Preparation Method: EPA 3546								
Acenaphthene	117	ug/kg	32.9	5	06/05/13 13:35	06/06/13 17:42	83-32-9	
Acenaphthylene	ND	ug/kg	32.9	5	06/05/13 13:35	06/06/13 17:42	208-96-8	
Anthracene	ND	ug/kg	32.9	5	06/05/13 13:35	06/06/13 17:42	120-12-7	
Benzo(a)anthracene	ND	ug/kg	32.9	5	06/05/13 13:35	06/06/13 17:42	56-55-3	
Benzo(a)pyrene	ND	ug/kg	32.9	5	06/05/13 13:35	06/06/13 17:42	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	32.9	5	06/05/13 13:35	06/06/13 17:42	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	32.9	5	06/05/13 13:35	06/06/13 17:42	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	32.9	5	06/05/13 13:35	06/06/13 17:42	207-08-9	
Chrysene	145	ug/kg	32.9	5	06/05/13 13:35	06/06/13 17:42	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	32.9	5	06/05/13 13:35	06/06/13 17:42	53-70-3	
Fluoranthene	83.2	ug/kg	32.9	5	06/05/13 13:35	06/06/13 17:42	206-44-0	
Fluorene	953	ug/kg	32.9	5	06/05/13 13:35	06/06/13 17:42	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	32.9	5	06/05/13 13:35	06/06/13 17:42	193-39-5	
1-Methylnaphthalene	785	ug/kg	32.9	5	06/05/13 13:35	06/06/13 17:42	90-12-0	N2
2-Methylnaphthalene	629	ug/kg	32.9	5	06/05/13 13:35	06/06/13 17:42	91-57-6	
Naphthalene	120	ug/kg	32.9	5	06/05/13 13:35	06/06/13 17:42	91-20-3	1d
Phenanthrene	1570	ug/kg	32.9	5	06/05/13 13:35	06/06/13 17:42	85-01-8	
Pyrene	135	ug/kg	32.9	5	06/05/13 13:35	06/06/13 17:42	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	78	%	38-110	5	06/05/13 13:35	06/06/13 17:42	321-60-8	
p-Terphenyl-d14 (S)	77	%	32-111	5	06/05/13 13:35	06/06/13 17:42	1718-51-0	

**Percent Moisture**

Analytical Method: ASTM D2974-87

Percent Moisture      **24.5** %      0.10      1      06/06/13 15:54

**4500 Chloride in Soil**

Analytical Method: SM 4500-Cl-E      Preparation Method: SM 4500-Cl-E

Chloride      **187** mg/kg      132      1      06/06/13 09:12      06/10/13 11:44      16887-00-6

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## ANALYTICAL RESULTS

Project: Citizens Energy Group  
Pace Project No.: 5081252

**Sample: 10**      **Lab ID: 5081252009**      Collected: 05/31/13 09:00      Received: 05/31/13 12:08      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b> Analytical Method: EPA 8270 by SIM      Preparation Method: EPA 3546								
Acenaphthene	23.3	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:00	83-32-9	
Acenaphthylene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:00	208-96-8	
Anthracene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:00	120-12-7	
Benzo(a)anthracene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:00	56-55-3	
Benzo(a)pyrene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:00	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:00	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:00	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:00	207-08-9	
Chrysene	31.3	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:00	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:00	53-70-3	
Fluoranthene	17.1	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:00	206-44-0	
Fluorene	199	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:00	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:00	193-39-5	
1-Methylnaphthalene	144	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:00	90-12-0	N2
2-Methylnaphthalene	143	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:00	91-57-6	
Naphthalene	31.0	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:00	91-20-3	
Phenanthrene	346	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:00	85-01-8	
Pyrene	30.0	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:00	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	66	%	38-110	1	06/05/13 13:35	06/06/13 18:00	321-60-8	
p-Terphenyl-d14 (S)	66	%	32-111	1	06/05/13 13:35	06/06/13 18:00	1718-51-0	

**Percent Moisture**

Analytical Method: ASTM D2974-87

Percent Moisture	23.0	%	0.10	1		06/06/13 15:54
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**4500 Chloride in Soil**

Analytical Method: SM 4500-Cl-E      Preparation Method: SM 4500-Cl-E

Chloride	169	mg/kg	129	1	06/06/13 09:12	06/10/13 11:45	16887-00-6
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## ANALYTICAL RESULTS

Project: Citizens Energy Group  
Pace Project No.: 5081252

Sample: 11 Lab ID: 5081252010 Collected: 05/31/13 09:10 Received: 05/31/13 12:08 Matrix: Solid

### Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b> Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	6.1	1	06/10/13 11:55	06/11/13 05:29	83-32-9	
Acenaphthylene	ND	ug/kg	6.1	1	06/10/13 11:55	06/11/13 05:29	208-96-8	
Anthracene	ND	ug/kg	6.1	1	06/10/13 11:55	06/11/13 05:29	120-12-7	
Benzo(a)anthracene	ND	ug/kg	6.1	1	06/10/13 11:55	06/11/13 05:29	56-55-3	
Benzo(a)pyrene	ND	ug/kg	6.1	1	06/10/13 11:55	06/11/13 05:29	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	6.1	1	06/10/13 11:55	06/11/13 05:29	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	6.1	1	06/10/13 11:55	06/11/13 05:29	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	6.1	1	06/10/13 11:55	06/11/13 05:29	207-08-9	
Chrysene	ND	ug/kg	6.1	1	06/10/13 11:55	06/11/13 05:29	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	6.1	1	06/10/13 11:55	06/11/13 05:29	53-70-3	
Fluoranthene	10.0	ug/kg	6.1	1	06/10/13 11:55	06/11/13 05:29	206-44-0	
Fluorene	14.4	ug/kg	6.1	1	06/10/13 11:55	06/11/13 05:29	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	6.1	1	06/10/13 11:55	06/11/13 05:29	193-39-5	
1-Methylnaphthalene	13.8	ug/kg	6.1	1	06/10/13 11:55	06/11/13 05:29	90-12-0	N2
2-Methylnaphthalene	10.5	ug/kg	6.1	1	06/10/13 11:55	06/11/13 05:29	91-57-6	
Naphthalene	ND	ug/kg	6.1	1	06/10/13 11:55	06/11/13 05:29	91-20-3	
Phenanthrene	29.8	ug/kg	6.1	1	06/10/13 11:55	06/11/13 05:29	85-01-8	
Pyrene	8.9	ug/kg	6.1	1	06/10/13 11:55	06/11/13 05:29	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	63 %		38-110	1	06/10/13 11:55	06/11/13 05:29	321-60-8	
p-Terphenyl-d14 (S)	54 %		32-111	1	06/10/13 11:55	06/11/13 05:29	1718-51-0	

### Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture 18.7 % 0.10 1 06/06/13 15:54

### 4500 Chloride in Soil

Analytical Method: SM 4500-Cl-E Preparation Method: SM 4500-Cl-E

Chloride ND mg/kg 122 1 06/06/13 09:12 06/10/13 11:46 16887-00-6

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## ANALYTICAL RESULTS

Project: Citizens Energy Group  
Pace Project No.: 5081252

**Sample: 12**      **Lab ID: 5081252011**      Collected: 05/31/13 09:20      Received: 05/31/13 12:08      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b> Analytical Method: EPA 8270 by SIM      Preparation Method: EPA 3546								
Acenaphthene	7.4	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:36	83-32-9	
Acenaphthylene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:36	208-96-8	
Anthracene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:36	120-12-7	
Benzo(a)anthracene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:36	56-55-3	
Benzo(a)pyrene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:36	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:36	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:36	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:36	207-08-9	
Chrysene	14.5	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:36	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:36	53-70-3	
Fluoranthene	14.5	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:36	206-44-0	
Fluorene	71.6	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:36	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:36	193-39-5	
1-Methylnaphthalene	50.5	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:36	90-12-0	N2
2-Methylnaphthalene	55.8	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:36	91-57-6	
Naphthalene	9.7	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:36	91-20-3	
Phenanthrene	132	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:36	85-01-8	
Pyrene	17.4	ug/kg	6.4	1	06/05/13 13:35	06/06/13 18:36	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	57	%	38-110	1	06/05/13 13:35	06/06/13 18:36	321-60-8	
p-Terphenyl-d14 (S)	50	%	32-111	1	06/05/13 13:35	06/06/13 18:36	1718-51-0	

### Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture	21.8	%	0.10	1		06/06/13 15:54
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### 4500 Chloride in Soil

Analytical Method: SM 4500-Cl-E      Preparation Method: SM 4500-Cl-E

Chloride	165	mg/kg	127	1	06/06/13 09:12	06/10/13 11:46	16887-00-6
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## ANALYTICAL RESULTS

Project: Citizens Energy Group  
Pace Project No.: 5081252

Sample: 13 Lab ID: 5081252012 Collected: 05/31/13 09:30 Received: 05/31/13 12:08 Matrix: Solid

### Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b> Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	6.5	ug/kg	5.9	1	06/05/13 13:35	06/06/13 18:54	83-32-9	
Acenaphthylene	ND	ug/kg	5.9	1	06/05/13 13:35	06/06/13 18:54	208-96-8	
Anthracene	7.0	ug/kg	5.9	1	06/05/13 13:35	06/06/13 18:54	120-12-7	
Benzo(a)anthracene	ND	ug/kg	5.9	1	06/05/13 13:35	06/06/13 18:54	56-55-3	
Benzo(a)pyrene	ND	ug/kg	5.9	1	06/05/13 13:35	06/06/13 18:54	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	5.9	1	06/05/13 13:35	06/06/13 18:54	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	5.9	1	06/05/13 13:35	06/06/13 18:54	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	5.9	1	06/05/13 13:35	06/06/13 18:54	207-08-9	
Chrysene	17.8	ug/kg	5.9	1	06/05/13 13:35	06/06/13 18:54	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	5.9	1	06/05/13 13:35	06/06/13 18:54	53-70-3	
Fluoranthene	12.9	ug/kg	5.9	1	06/05/13 13:35	06/06/13 18:54	206-44-0	
Fluorene	65.2	ug/kg	5.9	1	06/05/13 13:35	06/06/13 18:54	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	5.9	1	06/05/13 13:35	06/06/13 18:54	193-39-5	
1-Methylnaphthalene	33.7	ug/kg	5.9	1	06/05/13 13:35	06/06/13 18:54	90-12-0	N2
2-Methylnaphthalene	36.1	ug/kg	5.9	1	06/05/13 13:35	06/06/13 18:54	91-57-6	
Naphthalene	ND	ug/kg	5.9	1	06/05/13 13:35	06/06/13 18:54	91-20-3	
Phenanthrene	146	ug/kg	5.9	1	06/05/13 13:35	06/06/13 18:54	85-01-8	
Pyrene	18.0	ug/kg	5.9	1	06/05/13 13:35	06/06/13 18:54	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	60	%	38-110	1	06/05/13 13:35	06/06/13 18:54	321-60-8	
p-Terphenyl-d14 (S)	54	%	32-111	1	06/05/13 13:35	06/06/13 18:54	1718-51-0	

### Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture	16.1	%	0.10	1		06/06/13 15:54
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### 4500 Chloride in Soil

Analytical Method: SM 4500-Cl-E Preparation Method: SM 4500-Cl-E

Chloride	ND	mg/kg	119	1	06/06/13 09:12	06/10/13 11:47	16887-00-6
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## ANALYTICAL RESULTS

Project: Citizens Energy Group  
Pace Project No.: 5081252

Sample: 14 Lab ID: 5081252013 Collected: 05/31/13 09:40 Received: 05/31/13 12:08 Matrix: Solid

### Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b> Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	14.7	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:12	83-32-9	
Acenaphthylene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:12	208-96-8	
Anthracene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:12	120-12-7	
Benzo(a)anthracene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:12	56-55-3	
Benzo(a)pyrene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:12	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:12	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:12	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:12	207-08-9	
Chrysene	21.6	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:12	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:12	53-70-3	
Fluoranthene	10.1	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:12	206-44-0	
Fluorene	131	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:12	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:12	193-39-5	
1-Methylnaphthalene	76.5	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:12	90-12-0	N2
2-Methylnaphthalene	76.2	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:12	91-57-6	
Naphthalene	15.6	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:12	91-20-3	
Phenanthrene	237	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:12	85-01-8	
Pyrene	20.0	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:12	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	63	%	38-110	1	06/05/13 13:35	06/06/13 19:12	321-60-8	
p-Terphenyl-d14 (S)	71	%	32-111	1	06/05/13 13:35	06/06/13 19:12	1718-51-0	

### Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture 22.3 % 0.10 1 06/06/13 15:55

### 4500 Chloride in Soil

Analytical Method: SM 4500-Cl-E Preparation Method: SM 4500-Cl-E

Chloride 405 mg/kg 128 1 06/06/13 09:12 06/10/13 11:48 16887-00-6

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## ANALYTICAL RESULTS

Project: Citizens Energy Group  
Pace Project No.: 5081252

Sample: 15 Lab ID: 5081252014 Collected: 05/31/13 09:45 Received: 05/31/13 12:08 Matrix: Solid

### Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b> Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	6.3	1	06/05/13 13:35	06/06/13 19:30	83-32-9	
Acenaphthylene	12.2	ug/kg	6.3	1	06/05/13 13:35	06/06/13 19:30	208-96-8	
Anthracene	8.8	ug/kg	6.3	1	06/05/13 13:35	06/06/13 19:30	120-12-7	
Benzo(a)anthracene	10.7	ug/kg	6.3	1	06/05/13 13:35	06/06/13 19:30	56-55-3	
Benzo(a)pyrene	9.2	ug/kg	6.3	1	06/05/13 13:35	06/06/13 19:30	50-32-8	
Benzo(b)fluoranthene	11.0	ug/kg	6.3	1	06/05/13 13:35	06/06/13 19:30	205-99-2	
Benzo(g,h,i)perylene	7.1	ug/kg	6.3	1	06/05/13 13:35	06/06/13 19:30	191-24-2	
Benzo(k)fluoranthene	9.8	ug/kg	6.3	1	06/05/13 13:35	06/06/13 19:30	207-08-9	
Chrysene	23.2	ug/kg	6.3	1	06/05/13 13:35	06/06/13 19:30	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	6.3	1	06/05/13 13:35	06/06/13 19:30	53-70-3	
Fluoranthene	18.9	ug/kg	6.3	1	06/05/13 13:35	06/06/13 19:30	206-44-0	
Fluorene	54.7	ug/kg	6.3	1	06/05/13 13:35	06/06/13 19:30	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	6.3	1	06/05/13 13:35	06/06/13 19:30	193-39-5	
1-Methylnaphthalene	19.6	ug/kg	6.3	1	06/05/13 13:35	06/06/13 19:30	90-12-0	N2
2-Methylnaphthalene	21.2	ug/kg	6.3	1	06/05/13 13:35	06/06/13 19:30	91-57-6	
Naphthalene	ND	ug/kg	6.3	1	06/05/13 13:35	06/06/13 19:30	91-20-3	
Phenanthrene	127	ug/kg	6.3	1	06/05/13 13:35	06/06/13 19:30	85-01-8	
Pyrene	21.3	ug/kg	6.3	1	06/05/13 13:35	06/06/13 19:30	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	64	%	38-110	1	06/05/13 13:35	06/06/13 19:30	321-60-8	
p-Terphenyl-d14 (S)	59	%	32-111	1	06/05/13 13:35	06/06/13 19:30	1718-51-0	

### Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture	20.8	%	0.10	1		06/06/13 15:55
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### 4500 Chloride in Soil

Analytical Method: SM 4500-Cl-E Preparation Method: SM 4500-Cl-E

Chloride	159	mg/kg	126	1	06/06/13 09:12	06/10/13 11:48	16887-00-6
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## ANALYTICAL RESULTS

Project: Citizens Energy Group  
Pace Project No.: 5081252

**Sample: 16**      **Lab ID: 5081252015**      Collected: 05/31/13 09:15      Received: 05/31/13 12:08      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b> Analytical Method: EPA 8270 by SIM      Preparation Method: EPA 3546								
Acenaphthene	14.4	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:48	83-32-9	
Acenaphthylene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:48	208-96-8	
Anthracene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:48	120-12-7	
Benzo(a)anthracene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:48	56-55-3	
Benzo(a)pyrene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:48	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:48	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:48	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:48	207-08-9	
Chrysene	22.4	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:48	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:48	53-70-3	
Fluoranthene	11.0	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:48	206-44-0	
Fluorene	132	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:48	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:48	193-39-5	
1-Methylnaphthalene	66.1	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:48	90-12-0	N2
2-Methylnaphthalene	69.3	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:48	91-57-6	
Naphthalene	11.0	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:48	91-20-3	
Phenanthrene	239	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:48	85-01-8	
Pyrene	20.1	ug/kg	6.4	1	06/05/13 13:35	06/06/13 19:48	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	67	%	38-110	1	06/05/13 13:35	06/06/13 19:48	321-60-8	
p-Terphenyl-d14 (S)	66	%	32-111	1	06/05/13 13:35	06/06/13 19:48	1718-51-0	

### Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture	22.7	%	0.10	1		06/06/13 15:55
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### 4500 Chloride in Soil

Analytical Method: SM 4500-Cl-E      Preparation Method: SM 4500-Cl-E

Chloride	254	mg/kg	129	1	06/06/13 09:12	06/10/13 11:49	16887-00-6
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## ANALYTICAL RESULTS

Project: Citizens Energy Group  
Pace Project No.: 5081252

Sample: 17 Lab ID: 5081252016 Collected: 05/31/13 09:25 Received: 05/31/13 12:08 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b> Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	ND	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:06	83-32-9	
Acenaphthylene	ND	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:06	208-96-8	
Anthracene	ND	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:06	120-12-7	
Benzo(a)anthracene	ND	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:06	56-55-3	
Benzo(a)pyrene	ND	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:06	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:06	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:06	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:06	207-08-9	
Chrysene	9.3	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:06	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:06	53-70-3	
Fluoranthene	ND	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:06	206-44-0	
Fluorene	50.9	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:06	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:06	193-39-5	
1-Methylnaphthalene	25.6	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:06	90-12-0	N2
2-Methylnaphthalene	24.0	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:06	91-57-6	
Naphthalene	7.9	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:06	91-20-3	
Phenanthrene	91.9	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:06	85-01-8	
Pyrene	10.1	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:06	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	60	%	38-110	1	06/05/13 13:35	06/06/13 20:06	321-60-8	
p-Terphenyl-d14 (S)	53	%	32-111	1	06/05/13 13:35	06/06/13 20:06	1718-51-0	

### Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture 25.1 % 0.10 1 06/06/13 15:55

### 4500 Chloride in Soil

Analytical Method: SM 4500-Cl-E Preparation Method: SM 4500-Cl-E

Chloride 293 mg/kg 133 1 06/06/13 09:12 06/10/13 11:50 16887-00-6

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## ANALYTICAL RESULTS

Project: Citizens Energy Group  
Pace Project No.: 5081252

**Sample: 18**      **Lab ID: 5081252017**      Collected: 05/31/13 09:05      Received: 05/31/13 12:08      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b> Analytical Method: EPA 8270 by SIM      Preparation Method: EPA 3546								
Acenaphthene	10	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:24	83-32-9	
Acenaphthylene	ND	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:24	208-96-8	
Anthracene	ND	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:24	120-12-7	
Benzo(a)anthracene	ND	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:24	56-55-3	
Benzo(a)pyrene	ND	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:24	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:24	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:24	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:24	207-08-9	
Chrysene	16.5	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:24	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:24	53-70-3	
Fluoranthene	7.7	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:24	206-44-0	
Fluorene	85.2	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:24	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:24	193-39-5	
1-Methylnaphthalene	54.7	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:24	90-12-0	N2
2-Methylnaphthalene	64.6	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:24	91-57-6	
Naphthalene	11.0	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:24	91-20-3	
Phenanthrene	162	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:24	85-01-8	
Pyrene	14.4	ug/kg	6.6	1	06/05/13 13:35	06/06/13 20:24	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	63	%	38-110	1	06/05/13 13:35	06/06/13 20:24	321-60-8	
p-Terphenyl-d14 (S)	66	%	32-111	1	06/05/13 13:35	06/06/13 20:24	1718-51-0	

### Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture	23.9	%	0.10	1		06/06/13 15:56
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### 4500 Chloride in Soil

Analytical Method: SM 4500-Cl-E      Preparation Method: SM 4500-Cl-E

Chloride	232	mg/kg	131	1	06/06/13 09:12	06/10/13 11:51	16887-00-6
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## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Citizens Energy Group  
Pace Project No.: 5081252

Sample: R01 Lab ID: 5081252018 Collected: 05/31/13 09:35 Received: 05/31/13 12:08 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Acenaphthene	10.2	ug/kg	6.4	1	06/05/13 13:35	06/06/13 21:19	83-32-9	
Acenaphthylene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 21:19	208-96-8	
Anthracene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 21:19	120-12-7	
Benzo(a)anthracene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 21:19	56-55-3	
Benzo(a)pyrene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 21:19	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 21:19	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 21:19	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 21:19	207-08-9	
Chrysene	13.7	ug/kg	6.4	1	06/05/13 13:35	06/06/13 21:19	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 21:19	53-70-3	
Fluoranthene	8.0	ug/kg	6.4	1	06/05/13 13:35	06/06/13 21:19	206-44-0	
Fluorene	85.5	ug/kg	6.4	1	06/05/13 13:35	06/06/13 21:19	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	6.4	1	06/05/13 13:35	06/06/13 21:19	193-39-5	
1-Methylnaphthalene	61.6	ug/kg	6.4	1	06/05/13 13:35	06/06/13 21:19	90-12-0	N2
2-Methylnaphthalene	48.6	ug/kg	6.4	1	06/05/13 13:35	06/06/13 21:19	91-57-6	
Naphthalene	10.1	ug/kg	6.4	1	06/05/13 13:35	06/06/13 21:19	91-20-3	
Phenanthrene	140	ug/kg	6.4	1	06/05/13 13:35	06/06/13 21:19	85-01-8	
Pyrene	13.3	ug/kg	6.4	1	06/05/13 13:35	06/06/13 21:19	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	62	%	38-110	1	06/05/13 13:35	06/06/13 21:19	321-60-8	
p-Terphenyl-d14 (S)	50	%	32-111	1	06/05/13 13:35	06/06/13 21:19	1718-51-0	

### Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture	22.2	%	0.10	1		06/06/13 15:56
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### 4500 Chloride in Soil

Analytical Method: SM 4500-Cl-E Preparation Method: SM 4500-Cl-E

Chloride	253	mg/kg	129	1	06/06/13 09:12	06/10/13 11:54	16887-00-6
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## ANALYTICAL RESULTS

Project: Citizens Energy Group  
Pace Project No.: 5081252

**Sample: R02**      **Lab ID: 5081252019**      Collected: 05/31/13 09:38      Received: 05/31/13 12:08      Matrix: Solid

*Results reported on a "dry-weight" basis*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM    Preparation Method: EPA 3546						
Acenaphthene	ND	ug/kg	6.5	1	06/05/13 13:35	06/06/13 21:37	83-32-9	
Acenaphthylene	ND	ug/kg	6.5	1	06/05/13 13:35	06/06/13 21:37	208-96-8	
Anthracene	ND	ug/kg	6.5	1	06/05/13 13:35	06/06/13 21:37	120-12-7	
Benzo(a)anthracene	ND	ug/kg	6.5	1	06/05/13 13:35	06/06/13 21:37	56-55-3	
Benzo(a)pyrene	ND	ug/kg	6.5	1	06/05/13 13:35	06/06/13 21:37	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	6.5	1	06/05/13 13:35	06/06/13 21:37	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	6.5	1	06/05/13 13:35	06/06/13 21:37	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	6.5	1	06/05/13 13:35	06/06/13 21:37	207-08-9	
Chrysene	11.0	ug/kg	6.5	1	06/05/13 13:35	06/06/13 21:37	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	6.5	1	06/05/13 13:35	06/06/13 21:37	53-70-3	
Fluoranthene	ND	ug/kg	6.5	1	06/05/13 13:35	06/06/13 21:37	206-44-0	
Fluorene	60.1	ug/kg	6.5	1	06/05/13 13:35	06/06/13 21:37	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	6.5	1	06/05/13 13:35	06/06/13 21:37	193-39-5	
1-Methylnaphthalene	37.0	ug/kg	6.5	1	06/05/13 13:35	06/06/13 21:37	90-12-0	N2
2-Methylnaphthalene	39.1	ug/kg	6.5	1	06/05/13 13:35	06/06/13 21:37	91-57-6	
Naphthalene	6.5	ug/kg	6.5	1	06/05/13 13:35	06/06/13 21:37	91-20-3	
Phenanthrene	114	ug/kg	6.5	1	06/05/13 13:35	06/06/13 21:37	85-01-8	
Pyrene	10.6	ug/kg	6.5	1	06/05/13 13:35	06/06/13 21:37	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	63 %		38-110	1	06/05/13 13:35	06/06/13 21:37	321-60-8	
p-Terphenyl-d14 (S)	62 %		32-111	1	06/05/13 13:35	06/06/13 21:37	1718-51-0	

### Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture	22.7 %	0.10	1	06/06/13 15:56
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### 4500 Chloride in Soil

Analytical Method: SM 4500-Cl-E    Preparation Method: SM 4500-Cl-E

Chloride	ND	mg/kg	129	1	06/06/13 09:12	06/10/13 11:55	16887-00-6
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## ANALYTICAL RESULTS

Project: Citizens Energy Group  
Pace Project No.: 5081252

Sample: DUP Lab ID: 5081252020 Collected: 05/31/13 08:00 Received: 05/31/13 12:08 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Acenaphthene	ND	ug/kg	32.6	5	06/05/13 13:35	06/06/13 22:31	83-32-9	
Acenaphthylene	ND	ug/kg	32.6	5	06/05/13 13:35	06/06/13 22:31	208-96-8	
Anthracene	ND	ug/kg	32.6	5	06/05/13 13:35	06/06/13 22:31	120-12-7	
Benzo(a)anthracene	ND	ug/kg	32.6	5	06/05/13 13:35	06/06/13 22:31	56-55-3	
Benzo(a)pyrene	ND	ug/kg	32.6	5	06/05/13 13:35	06/06/13 22:31	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	32.6	5	06/05/13 13:35	06/06/13 22:31	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	32.6	5	06/05/13 13:35	06/06/13 22:31	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	32.6	5	06/05/13 13:35	06/06/13 22:31	207-08-9	
Chrysene	45.4	ug/kg	32.6	5	06/05/13 13:35	06/06/13 22:31	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	32.6	5	06/05/13 13:35	06/06/13 22:31	53-70-3	
Fluoranthene	ND	ug/kg	32.6	5	06/05/13 13:35	06/06/13 22:31	206-44-0	
Fluorene	284	ug/kg	32.6	5	06/05/13 13:35	06/06/13 22:31	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	32.6	5	06/05/13 13:35	06/06/13 22:31	193-39-5	
1-Methylnaphthalene	177	ug/kg	32.6	5	06/05/13 13:35	06/06/13 22:31	90-12-0	N2
2-Methylnaphthalene	147	ug/kg	32.6	5	06/05/13 13:35	06/06/13 22:31	91-57-6	
Naphthalene	33.5	ug/kg	32.6	5	06/05/13 13:35	06/06/13 22:31	91-20-3	1d
Phenanthrene	484	ug/kg	32.6	5	06/05/13 13:35	06/06/13 22:31	85-01-8	
Pyrene	39.5	ug/kg	32.6	5	06/05/13 13:35	06/06/13 22:31	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	67	%	38-110	5	06/05/13 13:35	06/06/13 22:31	321-60-8	
p-Terphenyl-d14 (S)	71	%	32-111	5	06/05/13 13:35	06/06/13 22:31	1718-51-0	

### Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture 23.3 % 0.10 1 06/06/13 15:56

### 4500 Chloride in Soil

Analytical Method: SM 4500-Cl-E Preparation Method: SM 4500-Cl-E

Chloride 328 mg/kg 130 1 06/06/13 09:12 06/10/13 11:56 16887-00-6

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## QUALITY CONTROL DATA

Project: Citizens Energy Group  
Pace Project No.: 5081252

QC Batch: OEXT/32976 Analysis Method: EPA 8270 by SIM  
QC Batch Method: EPA 3546 Analysis Description: 8270 MSSV PAH by SIM  
Associated Lab Samples: 5081252001, 5081252002, 5081252003, 5081252004, 5081252005, 5081252006, 5081252007, 5081252008, 5081252009, 5081252011, 5081252012, 5081252013, 5081252014, 5081252015, 5081252016, 5081252017, 5081252018, 5081252019, 5081252020

METHOD BLANK: 926702 Matrix: Solid

Associated Lab Samples: 5081252001, 5081252002, 5081252003, 5081252004, 5081252005, 5081252006, 5081252007, 5081252008, 5081252009, 5081252011, 5081252012, 5081252013, 5081252014, 5081252015, 5081252016, 5081252017, 5081252018, 5081252019, 5081252020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	ND	5.0	06/06/13 14:58	N2
2-Methylnaphthalene	ug/kg	ND	5.0	06/06/13 14:58	
Acenaphthene	ug/kg	ND	5.0	06/06/13 14:58	
Acenaphthylene	ug/kg	ND	5.0	06/06/13 14:58	
Anthracene	ug/kg	ND	5.0	06/06/13 14:58	
Benzo(a)anthracene	ug/kg	ND	5.0	06/06/13 14:58	
Benzo(a)pyrene	ug/kg	ND	5.0	06/06/13 14:58	
Benzo(b)fluoranthene	ug/kg	ND	5.0	06/06/13 14:58	
Benzo(g,h,i)perylene	ug/kg	ND	5.0	06/06/13 14:58	
Benzo(k)fluoranthene	ug/kg	ND	5.0	06/06/13 14:58	
Chrysene	ug/kg	ND	5.0	06/06/13 14:58	
Dibenz(a,h)anthracene	ug/kg	ND	5.0	06/06/13 14:58	
Fluoranthene	ug/kg	ND	5.0	06/06/13 14:58	
Fluorene	ug/kg	ND	5.0	06/06/13 14:58	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	5.0	06/06/13 14:58	
Naphthalene	ug/kg	ND	5.0	06/06/13 14:58	
Phenanthrene	ug/kg	ND	5.0	06/06/13 14:58	
Pyrene	ug/kg	ND	5.0	06/06/13 14:58	
2-Fluorobiphenyl (S)	%	70	38-110	06/06/13 14:58	
p-Terphenyl-d14 (S)	%	74	32-111	06/06/13 14:58	

LABORATORY CONTROL SAMPLE: 926703

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	333	197	59	40-102	N2
2-Methylnaphthalene	ug/kg	333	203	61	39-104	
Acenaphthene	ug/kg	333	209	63	43-108	
Acenaphthylene	ug/kg	333	216	65	44-110	
Anthracene	ug/kg	333	216	65	44-112	
Benzo(a)anthracene	ug/kg	333	227	68	43-124	
Benzo(a)pyrene	ug/kg	333	223	67	44-124	
Benzo(b)fluoranthene	ug/kg	333	228	68	44-123	
Benzo(g,h,i)perylene	ug/kg	333	218	65	44-118	
Benzo(k)fluoranthene	ug/kg	333	234	70	42-122	
Chrysene	ug/kg	333	233	70	44-124	
Dibenz(a,h)anthracene	ug/kg	333	220	66	44-119	
Fluoranthene	ug/kg	333	225	68	45-119	
Fluorene	ug/kg	333	210	63	44-113	

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## QUALITY CONTROL DATA

Project: Citizens Energy Group  
Pace Project No.: 5081252

LABORATORY CONTROL SAMPLE: 926703

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Indeno(1,2,3-cd)pyrene	ug/kg	333	219	66	44-119	
Naphthalene	ug/kg	333	200	60	42-103	
Phenanthrene	ug/kg	333	215	64	44-113	
Pyrene	ug/kg	333	229	69	45-123	
2-Fluorobiphenyl (S)	%			59	38-110	
p-Terphenyl-d14 (S)	%			66	32-111	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 926704 926705

Parameter	Units	5081252017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1-Methylnaphthalene	ug/kg	54.7	438	435	329	315	63	60	20-116	4	20	N2
2-Methylnaphthalene	ug/kg	64.6	438	435	340	338	63	63	10-131	1	20	
Acenaphthene	ug/kg	10	438	435	292	240	64	53	25-117	20	20	
Acenaphthylene	ug/kg	ND	438	435	296	235	68	54	27-123	23	20	R1
Anthracene	ug/kg	ND	438	435	290	201	66	46	20-123	36	20	R1
Benzo(a)anthracene	ug/kg	ND	438	435	267	176	61	41	23-124	41	20	R1
Benzo(a)pyrene	ug/kg	ND	438	435	254	172	58	40	23-120	38	20	R1
Benzo(b)fluoranthene	ug/kg	ND	438	435	248	170	57	39	24-117	37	20	R1
Benzo(g,h,i)perylene	ug/kg	ND	438	435	226	157	52	36	12-122	36	20	R1
Benzo(k)fluoranthene	ug/kg	ND	438	435	241	169	55	39	14-123	35	20	R1
Chrysene	ug/kg	16.5	438	435	273	181	59	38	22-124	41	20	R1
Dibenz(a,h)anthracene	ug/kg	ND	438	435	237	167	54	38	26-113	35	20	R1
Fluoranthene	ug/kg	7.7	438	435	280	184	62	41	21-125	41	20	R1
Fluorene	ug/kg	85.2	438	435	329	283	56	45	19-127	15	20	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	438	435	229	164	52	38	15-121	33	20	R1
Naphthalene	ug/kg	11.0	438	435	313	277	69	61	15-125	12	20	
Phenanthrene	ug/kg	162	438	435	375	300	49	32	10-139	22	20	R1
Pyrene	ug/kg	14.4	438	435	278	182	60	38	17-132	42	20	R1
2-Fluorobiphenyl (S)	%						61	57	38-110		20	
p-Terphenyl-d14 (S)	%						58	51	32-111		20	

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## QUALITY CONTROL DATA

Project: Citizens Energy Group  
Pace Project No.: 5081252

QC Batch:	OEXT/32998	Analysis Method:	EPA 8270 by SIM
QC Batch Method:	EPA 3546	Analysis Description:	8270 MSSV PAH by SIM
Associated Lab Samples:	5081252010		

METHOD BLANK: 928947 Matrix: Solid

Associated Lab Samples: 5081252010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	ND	5.0	06/11/13 00:21	N2
2-Methylnaphthalene	ug/kg	ND	5.0	06/11/13 00:21	
Acenaphthene	ug/kg	ND	5.0	06/11/13 00:21	
Acenaphthylene	ug/kg	ND	5.0	06/11/13 00:21	
Anthracene	ug/kg	ND	5.0	06/11/13 00:21	
Benzo(a)anthracene	ug/kg	ND	5.0	06/11/13 00:21	
Benzo(a)pyrene	ug/kg	ND	5.0	06/11/13 00:21	
Benzo(b)fluoranthene	ug/kg	ND	5.0	06/11/13 00:21	
Benzo(g,h,i)perylene	ug/kg	ND	5.0	06/11/13 00:21	
Benzo(k)fluoranthene	ug/kg	ND	5.0	06/11/13 00:21	
Chrysene	ug/kg	ND	5.0	06/11/13 00:21	
Dibenz(a,h)anthracene	ug/kg	ND	5.0	06/11/13 00:21	
Fluoranthene	ug/kg	ND	5.0	06/11/13 00:21	
Fluorene	ug/kg	ND	5.0	06/11/13 00:21	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	5.0	06/11/13 00:21	
Naphthalene	ug/kg	ND	5.0	06/11/13 00:21	
Phenanthrene	ug/kg	ND	5.0	06/11/13 00:21	
Pyrene	ug/kg	ND	5.0	06/11/13 00:21	
2-Fluorobiphenyl (S)	%	68	38-110	06/11/13 00:21	
p-Terphenyl-d14 (S)	%	74	32-111	06/11/13 00:21	

LABORATORY CONTROL SAMPLE: 928948

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	333	213	64	40-102	N2
2-Methylnaphthalene	ug/kg	333	222	66	39-104	
Acenaphthene	ug/kg	333	230	69	43-108	
Acenaphthylene	ug/kg	333	246	74	44-110	
Anthracene	ug/kg	333	235	70	44-112	
Benzo(a)anthracene	ug/kg	333	256	77	43-124	
Benzo(a)pyrene	ug/kg	333	248	74	44-124	
Benzo(b)fluoranthene	ug/kg	333	246	74	44-123	
Benzo(g,h,i)perylene	ug/kg	333	236	71	44-118	
Benzo(k)fluoranthene	ug/kg	333	250	75	42-122	
Chrysene	ug/kg	333	249	75	44-124	
Dibenz(a,h)anthracene	ug/kg	333	239	72	44-119	
Fluoranthene	ug/kg	333	250	75	45-119	
Fluorene	ug/kg	333	242	72	44-113	
Indeno(1,2,3-cd)pyrene	ug/kg	333	238	71	44-119	
Naphthalene	ug/kg	333	214	64	42-103	
Phenanthrene	ug/kg	333	236	71	44-113	

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## QUALITY CONTROL DATA

Project: Citizens Energy Group  
Pace Project No.: 5081252

LABORATORY CONTROL SAMPLE: 928948

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Pyrene	ug/kg	333	248	74	45-123	
2-Fluorobiphenyl (S)	%.			66	38-110	
p-Terphenyl-d14 (S)	%.			73	32-111	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 928949 928950

Parameter	Units	5081654001	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Conc.	Result	Result	% Rec	% Rec				
1-Methylnaphthalene	ug/kg	ND	380	380	206	228	54	60	20-116	10	20	N2
2-Methylnaphthalene	ug/kg	ND	380	380	212	234	56	61	10-131	10	20	
Acenaphthene	ug/kg	ND	380	380	229	242	60	64	25-117	5	20	
Acenaphthylene	ug/kg	ND	380	380	242	259	64	68	27-123	7	20	
Anthracene	ug/kg	ND	380	380	242	245	64	65	20-123	1	20	
Benzo(a)anthracene	ug/kg	ND	380	380	251	247	66	65	23-124	2	20	
Benzo(a)pyrene	ug/kg	ND	380	380	234	231	62	61	23-120	1	20	
Benzo(b)fluoranthene	ug/kg	ND	380	380	236	230	62	60	24-117	3	20	
Benzo(g,h,i)perylene	ug/kg	ND	380	380	216	208	57	55	12-122	4	20	
Benzo(k)fluoranthene	ug/kg	ND	380	380	233	224	61	59	14-123	4	20	
Chrysene	ug/kg	ND	380	380	248	239	65	63	22-124	4	20	
Dibenz(a,h)anthracene	ug/kg	ND	380	380	229	215	60	56	26-113	6	20	
Fluoranthene	ug/kg	ND	380	380	248	249	65	66	21-125	1	20	
Fluorene	ug/kg	ND	380	380	242	255	64	67	19-127	5	20	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	380	380	223	213	59	56	15-121	5	20	
Naphthalene	ug/kg	ND	380	380	207	229	54	60	15-125	10	20	
Phenanthrene	ug/kg	ND	380	380	241	243	63	64	10-139	1	20	
Pyrene	ug/kg	ND	380	380	249	246	65	65	17-132	1	20	
2-Fluorobiphenyl (S)	%.						56	60	38-110		20	
p-Terphenyl-d14 (S)	%.						62	62	32-111		20	

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: Citizens Energy Group  
Pace Project No.: 5081252

QC Batch: PMST/8358 Analysis Method: ASTM D2974-87  
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture  
Associated Lab Samples: 5081252001, 5081252002, 5081252003, 5081252004, 5081252005, 5081252006, 5081252007, 5081252008, 5081252009, 5081252010, 5081252011, 5081252012, 5081252013, 5081252014, 5081252015, 5081252016, 5081252017, 5081252018, 5081252019, 5081252020

SAMPLE DUPLICATE: 927835

Parameter	Units	5081252001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	25.2	25.7	2	5	

SAMPLE DUPLICATE: 927836

Parameter	Units	5081252017 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	23.9	22.6	6	5	R1

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: Citizens Energy Group  
Pace Project No.: 5081252

QC Batch:	WETA/9974	Analysis Method:	SM 4500-Cl-E
QC Batch Method:	SM 4500-Cl-E	Analysis Description:	4500 Chloride
Associated Lab Samples:	5081252001, 5081252002, 5081252003, 5081252004, 5081252005, 5081252006, 5081252007, 5081252008, 5081252009, 5081252010, 5081252011, 5081252012, 5081252013, 5081252014, 5081252015, 5081252016, 5081252017, 5081252018, 5081252019, 5081252020		

METHOD BLANK:	926297	Matrix:	Solid
Associated Lab Samples:	5081252001, 5081252002, 5081252003, 5081252004, 5081252005, 5081252006, 5081252007, 5081252008, 5081252009, 5081252010, 5081252011, 5081252012, 5081252013, 5081252014, 5081252015, 5081252016, 5081252017, 5081252018, 5081252019, 5081252020		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/kg	ND	100	06/10/13 11:36	

LABORATORY CONTROL SAMPLE:		926069				
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/kg	200	182	91	90-110	

MATRIX SPIKE SAMPLE:		926070					
Parameter	Units	5081252001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/kg	218	268	485	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:											
926071					926072						
Parameter	Units	5081252017	MS	MSD	MS	MSD	MS	MSD	% Rec	Max	Qual
		Result	Spike	Spike							
Chloride	ma/ka	232	263	263	486	484	97	96	90-110	0	20

## REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: Citizens Energy Group  
Pace Project No.: 5081252

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

1d	Due to the extract's physical characteristics, the analysis was performed at dilution. CEM 06/07/13
N2	The lab does not hold TNI accreditation for this parameter.
R1	RPD value was outside control limits.

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Citizens Energy Group  
Pace Project No.: 5081252

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5081252001	1	EPA 3546	OEXT/32976	EPA 8270 by SIM	MSSV/12700
5081252002	2	EPA 3546	OEXT/32976	EPA 8270 by SIM	MSSV/12700
5081252003	3	EPA 3546	OEXT/32976	EPA 8270 by SIM	MSSV/12700
5081252004	4	EPA 3546	OEXT/32976	EPA 8270 by SIM	MSSV/12700
5081252005	5	EPA 3546	OEXT/32976	EPA 8270 by SIM	MSSV/12700
5081252006	7	EPA 3546	OEXT/32976	EPA 8270 by SIM	MSSV/12700
5081252007	8	EPA 3546	OEXT/32976	EPA 8270 by SIM	MSSV/12700
5081252008	9	EPA 3546	OEXT/32976	EPA 8270 by SIM	MSSV/12700
5081252009	10	EPA 3546	OEXT/32976	EPA 8270 by SIM	MSSV/12700
5081252010	11	EPA 3546	OEXT/32998	EPA 8270 by SIM	MSSV/12728
5081252011	12	EPA 3546	OEXT/32976	EPA 8270 by SIM	MSSV/12700
5081252012	13	EPA 3546	OEXT/32976	EPA 8270 by SIM	MSSV/12700
5081252013	14	EPA 3546	OEXT/32976	EPA 8270 by SIM	MSSV/12700
5081252014	15	EPA 3546	OEXT/32976	EPA 8270 by SIM	MSSV/12700
5081252015	16	EPA 3546	OEXT/32976	EPA 8270 by SIM	MSSV/12700
5081252016	17	EPA 3546	OEXT/32976	EPA 8270 by SIM	MSSV/12700
5081252017	18	EPA 3546	OEXT/32976	EPA 8270 by SIM	MSSV/12700
5081252018	R01	EPA 3546	OEXT/32976	EPA 8270 by SIM	MSSV/12700
5081252019	R02	EPA 3546	OEXT/32976	EPA 8270 by SIM	MSSV/12700
5081252020	DUP	EPA 3546	OEXT/32976	EPA 8270 by SIM	MSSV/12700
5081252001	1	ASTM D2974-87	PMST/8358		
5081252002	2	ASTM D2974-87	PMST/8358		
5081252003	3	ASTM D2974-87	PMST/8358		
5081252004	4	ASTM D2974-87	PMST/8358		
5081252005	5	ASTM D2974-87	PMST/8358		
5081252006	7	ASTM D2974-87	PMST/8358		
5081252007	8	ASTM D2974-87	PMST/8358		
5081252008	9	ASTM D2974-87	PMST/8358		
5081252009	10	ASTM D2974-87	PMST/8358		
5081252010	11	ASTM D2974-87	PMST/8358		
5081252011	12	ASTM D2974-87	PMST/8358		
5081252012	13	ASTM D2974-87	PMST/8358		
5081252013	14	ASTM D2974-87	PMST/8358		
5081252014	15	ASTM D2974-87	PMST/8358		
5081252015	16	ASTM D2974-87	PMST/8358		
5081252016	17	ASTM D2974-87	PMST/8358		
5081252017	18	ASTM D2974-87	PMST/8358		
5081252018	R01	ASTM D2974-87	PMST/8358		
5081252019	R02	ASTM D2974-87	PMST/8358		
5081252020	DUP	ASTM D2974-87	PMST/8358		
5081252001	1	SM 4500-CI-E	WETA/9974	SM 4500-CI-E	WETA/10002
5081252002	2	SM 4500-CI-E	WETA/9974	SM 4500-CI-E	WETA/10002
5081252003	3	SM 4500-CI-E	WETA/9974	SM 4500-CI-E	WETA/10002
5081252004	4	SM 4500-CI-E	WETA/9974	SM 4500-CI-E	WETA/10002
5081252005	5	SM 4500-CI-E	WETA/9974	SM 4500-CI-E	WETA/10002
5081252006	7	SM 4500-CI-E	WETA/9974	SM 4500-CI-E	WETA/10002
5081252007	8	SM 4500-CI-E	WETA/9974	SM 4500-CI-E	WETA/10002

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Citizens Energy Group  
Pace Project No.: 5081252

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5081252008	9	SM 4500-CI-E	WETA/9974	SM 4500-CI-E	WETA/10002
5081252009	10	SM 4500-CI-E	WETA/9974	SM 4500-CI-E	WETA/10002
5081252010	11	SM 4500-CI-E	WETA/9974	SM 4500-CI-E	WETA/10002
5081252011	12	SM 4500-CI-E	WETA/9974	SM 4500-CI-E	WETA/10002
5081252012	13	SM 4500-CI-E	WETA/9974	SM 4500-CI-E	WETA/10002
5081252013	14	SM 4500-CI-E	WETA/9974	SM 4500-CI-E	WETA/10002
5081252014	15	SM 4500-CI-E	WETA/9974	SM 4500-CI-E	WETA/10002
5081252015	16	SM 4500-CI-E	WETA/9974	SM 4500-CI-E	WETA/10002
5081252016	17	SM 4500-CI-E	WETA/9974	SM 4500-CI-E	WETA/10002
5081252017	18	SM 4500-CI-E	WETA/9974	SM 4500-CI-E	WETA/10002
5081252018	R01	SM 4500-CI-E	WETA/9974	SM 4500-CI-E	WETA/10002
5081252019	R02	SM 4500-CI-E	WETA/9974	SM 4500-CI-E	WETA/10002
5081252020	DUP	SM 4500-CI-E	WETA/9974	SM 4500-CI-E	WETA/10002

## REPORT OF LABORATORY ANALYSIS

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# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:		Page: 1 of 2	
Company: <b>FFI Global</b>		Report To: <b>Scott Verow</b>		Attention: <b>Lynn Yeary</b>		1683735	
Address: <b>8091 Center Run Dr Suite 191</b>		Copy To: <b>Kurt &amp; Gillian</b>		Company Name:			
Email To: <b>Scott.verow@ffi.com</b>		Purchase Order No.: <b>98510-05144</b>		Address:		<b>REGULATORY AGENCY</b> <input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER	
Phone: <b>5856430</b> Fax:		Project Name: <b>Citizens Energy Group</b>		Pace Quote Reference:			
Requested Due Date/TAT:		Project Number: <b>98510-05144</b>		Pace Project Manager:			
				Pace Profile #:		Site Location: <b>IN</b> STATE:	

Section D Required Client Information		Matrix Codes MATRIX / CODE		COLLECTED	PRESERVATIVES	Requested Analysis Filtered (Y/N)																					
		Drinking Water DW	WT			Waste Water WW	P	SL	OL	WP	AR	TS	OT														
ITEM #	SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	DATE	TIME	DATE	TIME	UNPRESERVED	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	Analysis Test 1	Analysis Test 2	Analysis Test 3	Analysis Test 4	Analysis Test 5	Analysis Test 6	Analysis Test 7	Analysis Test 8	Analysis Test 9	Analysis Test 10	Analysis Test 11	Analysis Test 12	Residual Chlorine (Y/N)	Pace Project No. / Lab I.D.
1	5856430 5/31/13 12:08 12:08 12:08 12:08 12:08 12:08 12:08 12:08 12:08 12:08 12:08																										
2																											
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

ADDITIONAL COMMENTS RELINQUISHED BY / AFFILIATION DATE TIME		ACCEPTED BY / AFFILIATION DATE TIME		SAMPLE CONDITIONS Temp in °C Received on Ice (Y/N) Custody Sealed Cooler (Y/N) Samples Intact (Y/N)	
5/31/13 12:08 5/31/13 12:08		5/31/13 12:08 5/31/13 12:08		12:08 N Y	

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	DATE Signed (MM/DD/YY):
SIGNATURE of SAMPLER:	

Company: <b>EPI Global</b>		Report To:	Attention:	1683736	
Address:		Copy To:	Company Name:	REGULATORY AGENCY	
			Address:	<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER _____	
Email To:		Purchase Order No.: <b>98510-05144</b>	Pace Quote Reference:	Site Location	
Phone:	Fax:	Project Name:	Pace Project Manager:	STATE: _____	
Requested Due Date/TAT:		Project Number: <b>98510-05144</b>	Pace Profile #:		

[illegible][illegible]

<b>SAMPLER NAME AND SIGNATURE</b>		<b>Temp in °C</b>	<b>Received on Ice (Y/N)</b>	<b>Custody Sealed Cooler (Y/N)</b>	<b>Samples Intact (Y/N)</b>
<b>PRINT Name of SAMPLER:</b>					
<b>SIGNATURE of SAMPLER:</b>	<b>DATE Signed (MM/DD/YY):</b>				

# Sample Condition Upon Receipt

Pace Analytical

Client Name:

EFI Global

Project #

6081252

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☒ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☒ Other

Box

Date/Time 5035A kits placed in freezer

Thermometer Used 1 2 3 4 5 6 A B C D E

Type of Ice: Wet Blue None

☐ Samples on ice, cooling process has begun

Cooler Temperature (Corrected, if applicable)

1.8°C

Ice Visible in Sample Containers: ☐ yes ☒ no

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: CP 5/31/13

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	5.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8. No times on samples
-Includes date/time/ID/Analysis		
All containers needing acid/base pres have been checked?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	9. (Circle) HNO3 H2SO4 NaOH HCl
exceptions: VOA, coliform, TOC, G&G		
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Project Manager Review		
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.

Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted:

Date/Time:

Comments/ Resolution:

Project Manager Review:

Date:

6/3/13



CLIENT:

EFT Global

## Sample Container Count



COC PAGE 1 of 2

COC ID# 1683735

Project # 6081252

Sample Line

Item	DG9H	AG1U	WGFU	AG0U	R.4/6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	Comments
1			1											
2														
3														
4														
5			✓											
6														
7			1											
8														
9														
10														
11														
12			✓											

## Container Codes

DG9H	40mL HCL amber voa vial	AG0U	100mL unpreserved amber glass	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1 liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved amber vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	AF	Air Filter	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved clear vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFU	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

# Sample Container Count



CLIENT: EFI Global

COC PAGE 2 of 2

COC ID# 1683736

Project # 0081252

Sample Line

Item	DG9H	AG1U	WGFU	AG0U	R 4/6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	Comments
13			1											
14			1											
15			1											
16			1											
17			1											
18			3											
19			1											
20			1											
21			1											
10														
11														
12														

## Container Codes

DG9H	40mL HCL amber vial	AG0U	100mL unpreserved amber glass	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1 liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved amber vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	AF	Air Filter	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved clear vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

June 20, 2013

Mr. Scott Verow  
EFI Global, Inc.  
8091 Center Run Drive  
Suite 191  
Indianapolis, IN 46250

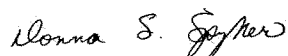
RE: Project: Citizens Energy 98510-05144  
Pace Project No.: 5081892

Dear Mr. Verow:

Enclosed are the analytical results for sample(s) received by the laboratory on June 12, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Donna Spyker

donna.spyker@pacelabs.com  
Project Manager

Enclosures



## REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.  
1233 Dublin Road  
Columbus, OH 43215  
(614)486-5421

Pace Analytical Services, Inc.  
7726 Moller Road  
Indianapolis, IN 46268  
(317)875-5894

## CERTIFICATIONS

Project: Citizens Energy 98510-05144  
Pace Project No.: 5081892

---

### Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268  
Illinois Certification #: 200074  
Indiana Certification #: C-49-06  
Kansas Certification #: E-10247  
Kentucky Certification #: 0042

Louisiana/NELAC Certification #: 04076  
Ohio VAP Certification #: 101170-0  
Pennsylvania Certification #: 68-04991  
West Virginia Certification #: 330

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## SAMPLE SUMMARY

Project: Citizens Energy 98510-05144  
Pace Project No.: 5081892

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5081892001	19	Solid	06/12/13 10:40	06/12/13 13:55
5081892002	20	Solid	06/12/13 10:45	06/12/13 13:55
5081892003	21	Solid	06/12/13 10:50	06/12/13 13:55
5081892004	22	Solid	06/12/13 10:55	06/12/13 13:55
5081892005	23	Solid	06/12/13 11:00	06/12/13 13:55
5081892006	24	Solid	06/12/13 11:10	06/12/13 13:55
5081892007	25	Solid	06/12/13 11:15	06/12/13 13:55
5081892008	DUP	Solid	06/12/13 08:00	06/12/13 13:55

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## SAMPLE ANALYTE COUNT

Project: Citizens Energy 98510-05144  
Pace Project No.: 5081892

Lab ID	Sample ID	Method	Analysts	Analytes Reported
5081892001	19	EPA 8270 by SIM	CEM	20
		ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
5081892002	20	EPA 8270 by SIM	CEM	20
		ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
5081892003	21	EPA 8270 by SIM	CEM	20
		ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
5081892004	22	EPA 8270 by SIM	CEM	20
		ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
5081892005	23	EPA 8270 by SIM	CEM	20
		ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
5081892006	24	EPA 8270 by SIM	CEM	20
		ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
5081892007	25	EPA 8270 by SIM	CEM	20
		ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1
5081892008	DUP	EPA 8270 by SIM	CEM	20
		ASTM D2974-87	ZM	1
		SM 4500-CI-E	ILP	1

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## ANALYTICAL RESULTS

Project: Citizens Energy 98510-05144  
Pace Project No.: 5081892

Sample: 19 Lab ID: 5081892001 Collected: 06/12/13 10:40 Received: 06/12/13 13:55 Matrix: Solid

### Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b> Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	104	ug/kg	28.7	5	06/19/13 09:40	06/19/13 13:22	83-32-9	
Acenaphthylene	ND	ug/kg	28.7	5	06/19/13 09:40	06/19/13 13:22	208-96-8	
Anthracene	ND	ug/kg	28.7	5	06/19/13 09:40	06/19/13 13:22	120-12-7	
Benzo(a)anthracene	ND	ug/kg	28.7	5	06/19/13 09:40	06/19/13 13:22	56-55-3	
Benzo(a)pyrene	ND	ug/kg	28.7	5	06/19/13 09:40	06/19/13 13:22	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	28.7	5	06/19/13 09:40	06/19/13 13:22	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	28.7	5	06/19/13 09:40	06/19/13 13:22	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	28.7	5	06/19/13 09:40	06/19/13 13:22	207-08-9	
Chrysene	148	ug/kg	28.7	5	06/19/13 09:40	06/19/13 13:22	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	28.7	5	06/19/13 09:40	06/19/13 13:22	53-70-3	
Fluoranthene	65.4	ug/kg	28.7	5	06/19/13 09:40	06/19/13 13:22	206-44-0	
Fluorene	880	ug/kg	28.7	5	06/19/13 09:40	06/19/13 13:22	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	28.7	5	06/19/13 09:40	06/19/13 13:22	193-39-5	
1-Methylnaphthalene	491	ug/kg	28.7	5	06/19/13 09:40	06/19/13 13:22	90-12-0	N2
2-Methylnaphthalene	147	ug/kg	28.7	5	06/19/13 09:40	06/19/13 13:22	91-57-6	
Naphthalene	71.2	ug/kg	28.7	5	06/19/13 09:40	06/19/13 13:22	91-20-3	1d
Phenanthrene	1130	ug/kg	28.7	5	06/19/13 09:40	06/19/13 13:22	85-01-8	
Pyrene	121	ug/kg	28.7	5	06/19/13 09:40	06/19/13 13:22	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	66	%	38-110	5	06/19/13 09:40	06/19/13 13:22	321-60-8	
p-Terphenyl-d14 (S)	78	%	32-111	5	06/19/13 09:40	06/19/13 13:22	1718-51-0	

### Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture 13.4 % 0.10 1 06/17/13 15:48

### 4500 Chloride in Soil

Analytical Method: SM 4500-Cl-E Preparation Method: SM 4500-Cl-E

Chloride ND mg/kg 115 1 06/15/13 13:33 06/17/13 13:15 16887-00-6

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## ANALYTICAL RESULTS

Project: Citizens Energy 98510-05144  
Pace Project No.: 5081892

**Sample: 20**      **Lab ID: 5081892002**      Collected: 06/12/13 10:45      Received: 06/12/13 13:55      Matrix: Solid

### Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b> Analytical Method: EPA 8270 by SIM      Preparation Method: EPA 3546								
Acenaphthene	131	ug/kg	29.4	5	06/19/13 09:40	06/19/13 13:40	83-32-9	
Acenaphthylene	ND	ug/kg	29.4	5	06/19/13 09:40	06/19/13 13:40	208-96-8	
Anthracene	ND	ug/kg	29.4	5	06/19/13 09:40	06/19/13 13:40	120-12-7	
Benzo(a)anthracene	ND	ug/kg	29.4	5	06/19/13 09:40	06/19/13 13:40	56-55-3	
Benzo(a)pyrene	ND	ug/kg	29.4	5	06/19/13 09:40	06/19/13 13:40	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	29.4	5	06/19/13 09:40	06/19/13 13:40	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	29.4	5	06/19/13 09:40	06/19/13 13:40	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	29.4	5	06/19/13 09:40	06/19/13 13:40	207-08-9	
Chrysene	176	ug/kg	29.4	5	06/19/13 09:40	06/19/13 13:40	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	29.4	5	06/19/13 09:40	06/19/13 13:40	53-70-3	
Fluoranthene	77.0	ug/kg	29.4	5	06/19/13 09:40	06/19/13 13:40	206-44-0	
Fluorene	1180	ug/kg	29.4	5	06/19/13 09:40	06/19/13 13:40	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	29.4	5	06/19/13 09:40	06/19/13 13:40	193-39-5	
1-Methylnaphthalene	786	ug/kg	29.4	5	06/19/13 09:40	06/19/13 13:40	90-12-0	N2
2-Methylnaphthalene	290	ug/kg	29.4	5	06/19/13 09:40	06/19/13 13:40	91-57-6	
Naphthalene	112	ug/kg	29.4	5	06/19/13 09:40	06/19/13 13:40	91-20-3	1d
Phenanthrene	1770	ug/kg	29.4	5	06/19/13 09:40	06/19/13 13:40	85-01-8	
Pyrene	143	ug/kg	29.4	5	06/19/13 09:40	06/19/13 13:40	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	59	%	38-110	5	06/19/13 09:40	06/19/13 13:40	321-60-8	
p-Terphenyl-d14 (S)	70	%	32-111	5	06/19/13 09:40	06/19/13 13:40	1718-51-0	

### Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture      **15.8** %      0.10      1      06/17/13 15:48

### 4500 Chloride in Soil

Analytical Method: SM 4500-Cl-E      Preparation Method: SM 4500-Cl-E

Chloride      **119** mg/kg      119      1      06/15/13 13:33      06/17/13 13:17      16887-00-6

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## ANALYTICAL RESULTS

Project: Citizens Energy 98510-05144  
Pace Project No.: 5081892

Sample: 21 Lab ID: 5081892003 Collected: 06/12/13 10:50 Received: 06/12/13 13:55 Matrix: Solid

### Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546						
Acenaphthene	80.2	ug/kg	29.0	5	06/19/13 09:40	06/19/13 13:57	83-32-9	
Acenaphthylene	ND	ug/kg	29.0	5	06/19/13 09:40	06/19/13 13:57	208-96-8	
Anthracene	ND	ug/kg	29.0	5	06/19/13 09:40	06/19/13 13:57	120-12-7	
Benzo(a)anthracene	ND	ug/kg	29.0	5	06/19/13 09:40	06/19/13 13:57	56-55-3	
Benzo(a)pyrene	ND	ug/kg	29.0	5	06/19/13 09:40	06/19/13 13:57	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	29.0	5	06/19/13 09:40	06/19/13 13:57	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	29.0	5	06/19/13 09:40	06/19/13 13:57	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	29.0	5	06/19/13 09:40	06/19/13 13:57	207-08-9	
Chrysene	149	ug/kg	29.0	5	06/19/13 09:40	06/19/13 13:57	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	29.0	5	06/19/13 09:40	06/19/13 13:57	53-70-3	
Fluoranthene	65.8	ug/kg	29.0	5	06/19/13 09:40	06/19/13 13:57	206-44-0	
Fluorene	756	ug/kg	29.0	5	06/19/13 09:40	06/19/13 13:57	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	29.0	5	06/19/13 09:40	06/19/13 13:57	193-39-5	
1-Methylnaphthalene	279	ug/kg	29.0	5	06/19/13 09:40	06/19/13 13:57	90-12-0	N2
2-Methylnaphthalene	ND	ug/kg	29.0	5	06/19/13 09:40	06/19/13 13:57	91-57-6	
Naphthalene	139	ug/kg	29.0	5	06/19/13 09:40	06/19/13 13:57	91-20-3	1d
Phenanthrene	960	ug/kg	29.0	5	06/19/13 09:40	06/19/13 13:57	85-01-8	
Pyrene	119	ug/kg	29.0	5	06/19/13 09:40	06/19/13 13:57	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	61	%	38-110	5	06/19/13 09:40	06/19/13 13:57	321-60-8	
p-Terphenyl-d14 (S)	74	%	32-111	5	06/19/13 09:40	06/19/13 13:57	1718-51-0	

### Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture 14.5 % 0.10 1 06/17/13 15:48

### 4500 Chloride in Soil

Analytical Method: SM 4500-Cl-E Preparation Method: SM 4500-Cl-E

Chloride 184 mg/kg 117 1 06/15/13 13:33 06/17/13 13:18 16887-00-6

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## ANALYTICAL RESULTS

Project: Citizens Energy 98510-05144  
Pace Project No.: 5081892

**Sample: 22**      **Lab ID: 5081892004**      Collected: 06/12/13 10:55      Received: 06/12/13 13:55      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b>		Analytical Method: EPA 8270 by SIM    Preparation Method: EPA 3546						
Acenaphthene	122	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:15	83-32-9	
Acenaphthylene	ND	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:15	208-96-8	
Anthracene	ND	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:15	120-12-7	
Benzo(a)anthracene	ND	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:15	56-55-3	
Benzo(a)pyrene	ND	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:15	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:15	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:15	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:15	207-08-9	
Chrysene	162	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:15	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:15	53-70-3	
Fluoranthene	72.3	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:15	206-44-0	
Fluorene	1130	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:15	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:15	193-39-5	
1-Methylnaphthalene	807	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:15	90-12-0	N2
2-Methylnaphthalene	554	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:15	91-57-6	
Naphthalene	137	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:15	91-20-3	1d
Phenanthrene	1690	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:15	85-01-8	
Pyrene	129	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:15	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	69	%	38-110	5	06/19/13 09:40	06/19/13 14:15	321-60-8	
p-Terphenyl-d14 (S)	78	%	32-111	5	06/19/13 09:40	06/19/13 14:15	1718-51-0	

**Percent Moisture**

Analytical Method: ASTM D2974-87

Percent Moisture      **14.4** %      0.10      1      06/17/13 15:48

**4500 Chloride in Soil**

Analytical Method: SM 4500-Cl-E    Preparation Method: SM 4500-Cl-E

Chloride      ND mg/kg      117      1      06/15/13 13:33      06/17/13 13:18      16887-00-6

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## ANALYTICAL RESULTS

Project: Citizens Energy 98510-05144  
Pace Project No.: 5081892

Sample: 23 Lab ID: 5081892005 Collected: 06/12/13 11:00 Received: 06/12/13 13:55 Matrix: Solid

### Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b> Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Acenaphthene	71.2	ug/kg	28.6	5	06/19/13 09:40	06/19/13 14:33	83-32-9	
Acenaphthylene	ND	ug/kg	28.6	5	06/19/13 09:40	06/19/13 14:33	208-96-8	
Anthracene	ND	ug/kg	28.6	5	06/19/13 09:40	06/19/13 14:33	120-12-7	
Benzo(a)anthracene	ND	ug/kg	28.6	5	06/19/13 09:40	06/19/13 14:33	56-55-3	
Benzo(a)pyrene	ND	ug/kg	28.6	5	06/19/13 09:40	06/19/13 14:33	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	28.6	5	06/19/13 09:40	06/19/13 14:33	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	28.6	5	06/19/13 09:40	06/19/13 14:33	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	28.6	5	06/19/13 09:40	06/19/13 14:33	207-08-9	
Chrysene	101	ug/kg	28.6	5	06/19/13 09:40	06/19/13 14:33	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	28.6	5	06/19/13 09:40	06/19/13 14:33	53-70-3	
Fluoranthene	50.3	ug/kg	28.6	5	06/19/13 09:40	06/19/13 14:33	206-44-0	
Fluorene	673	ug/kg	28.6	5	06/19/13 09:40	06/19/13 14:33	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	28.6	5	06/19/13 09:40	06/19/13 14:33	193-39-5	
1-Methylnaphthalene	505	ug/kg	28.6	5	06/19/13 09:40	06/19/13 14:33	90-12-0	N2
2-Methylnaphthalene	642	ug/kg	28.6	5	06/19/13 09:40	06/19/13 14:33	91-57-6	
Naphthalene	134	ug/kg	28.6	5	06/19/13 09:40	06/19/13 14:33	91-20-3	1d
Phenanthrene	1040	ug/kg	28.6	5	06/19/13 09:40	06/19/13 14:33	85-01-8	
Pyrene	86.1	ug/kg	28.6	5	06/19/13 09:40	06/19/13 14:33	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	72	%	38-110	5	06/19/13 09:40	06/19/13 14:33	321-60-8	
p-Terphenyl-d14 (S)	80	%	32-111	5	06/19/13 09:40	06/19/13 14:33	1718-51-0	

### Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture 12.9 % 0.10 1 06/17/13 15:49

### 4500 Chloride in Soil

Analytical Method: SM 4500-Cl-E Preparation Method: SM 4500-Cl-E

Chloride ND mg/kg 115 1 06/15/13 13:33 06/17/13 13:19 16887-00-6

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## ANALYTICAL RESULTS

Project: Citizens Energy 98510-05144  
Pace Project No.: 5081892

**Sample: 24**      **Lab ID: 5081892006**      Collected: 06/12/13 11:10      Received: 06/12/13 13:55      Matrix: Solid

### Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b> Analytical Method: EPA 8270 by SIM      Preparation Method: EPA 3546								
Acenaphthene	46.8	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:51	83-32-9	
Acenaphthylene	ND	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:51	208-96-8	
Anthracene	ND	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:51	120-12-7	
Benzo(a)anthracene	ND	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:51	56-55-3	
Benzo(a)pyrene	ND	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:51	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:51	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:51	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:51	207-08-9	
Chrysene	76.3	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:51	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:51	53-70-3	
Fluoranthene	44.8	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:51	206-44-0	
Fluorene	420	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:51	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:51	193-39-5	
1-Methylnaphthalene	241	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:51	90-12-0	N2
2-Methylnaphthalene	82.8	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:51	91-57-6	
Naphthalene	57.6	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:51	91-20-3	1d
Phenanthrene	652	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:51	85-01-8	
Pyrene	65.5	ug/kg	29.2	5	06/19/13 09:40	06/19/13 14:51	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	67 %		38-110	5	06/19/13 09:40	06/19/13 14:51	321-60-8	
p-Terphenyl-d14 (S)	75 %		32-111	5	06/19/13 09:40	06/19/13 14:51	1718-51-0	

### Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture	15.5 %	0.10	1	06/17/13 15:49
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### 4500 Chloride in Soil

Analytical Method: SM 4500-Cl-E      Preparation Method: SM 4500-Cl-E

Chloride	ND mg/kg	118	1	06/15/13 13:33	06/17/13 13:20	16887-00-6
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## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Citizens Energy 98510-05144  
Pace Project No.: 5081892

**Sample: 25**      **Lab ID: 5081892007**      Collected: 06/12/13 11:15      Received: 06/12/13 13:55      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b> Analytical Method: EPA 8270 by SIM      Preparation Method: EPA 3546								
Acenaphthene	53.3	ug/kg	28.3	5	06/19/13 09:40	06/19/13 15:09	83-32-9	
Acenaphthylene	ND	ug/kg	28.3	5	06/19/13 09:40	06/19/13 15:09	208-96-8	
Anthracene	ND	ug/kg	28.3	5	06/19/13 09:40	06/19/13 15:09	120-12-7	
Benzo(a)anthracene	ND	ug/kg	28.3	5	06/19/13 09:40	06/19/13 15:09	56-55-3	
Benzo(a)pyrene	ND	ug/kg	28.3	5	06/19/13 09:40	06/19/13 15:09	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	28.3	5	06/19/13 09:40	06/19/13 15:09	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	28.3	5	06/19/13 09:40	06/19/13 15:09	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	28.3	5	06/19/13 09:40	06/19/13 15:09	207-08-9	
Chrysene	76.1	ug/kg	28.3	5	06/19/13 09:40	06/19/13 15:09	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	28.3	5	06/19/13 09:40	06/19/13 15:09	53-70-3	
Fluoranthene	36.1	ug/kg	28.3	5	06/19/13 09:40	06/19/13 15:09	206-44-0	
Fluorene	486	ug/kg	28.3	5	06/19/13 09:40	06/19/13 15:09	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	28.3	5	06/19/13 09:40	06/19/13 15:09	193-39-5	
1-Methylnaphthalene	323	ug/kg	28.3	5	06/19/13 09:40	06/19/13 15:09	90-12-0	N2
2-Methylnaphthalene	86.5	ug/kg	28.3	5	06/19/13 09:40	06/19/13 15:09	91-57-6	
Naphthalene	56.1	ug/kg	28.3	5	06/19/13 09:40	06/19/13 15:09	91-20-3	1d
Phenanthrene	758	ug/kg	28.3	5	06/19/13 09:40	06/19/13 15:09	85-01-8	
Pyrene	62.0	ug/kg	28.3	5	06/19/13 09:40	06/19/13 15:09	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	73	%	38-110	5	06/19/13 09:40	06/19/13 15:09	321-60-8	
p-Terphenyl-d14 (S)	80	%	32-111	5	06/19/13 09:40	06/19/13 15:09	1718-51-0	

**Percent Moisture**

Analytical Method: ASTM D2974-87

Percent Moisture	12.4	%	0.10	1		06/17/13 15:49
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**4500 Chloride in Soil**

Analytical Method: SM 4500-Cl-E      Preparation Method: SM 4500-Cl-E

Chloride	ND	mg/kg	114	1	06/15/13 13:33	06/17/13 13:22	16887-00-6
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## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Citizens Energy 98510-05144  
Pace Project No.: 5081892

**Sample: DUP**      **Lab ID: 5081892008**      Collected: 06/12/13 08:00      Received: 06/12/13 13:55      Matrix: Solid

**Results reported on a "dry-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by SIM</b> Analytical Method: EPA 8270 by SIM      Preparation Method: EPA 3546								
Acenaphthene	38.9	ug/kg	28.6	5	06/19/13 09:40	06/19/13 15:27	83-32-9	
Acenaphthylene	ND	ug/kg	28.6	5	06/19/13 09:40	06/19/13 15:27	208-96-8	
Anthracene	ND	ug/kg	28.6	5	06/19/13 09:40	06/19/13 15:27	120-12-7	
Benzo(a)anthracene	ND	ug/kg	28.6	5	06/19/13 09:40	06/19/13 15:27	56-55-3	
Benzo(a)pyrene	ND	ug/kg	28.6	5	06/19/13 09:40	06/19/13 15:27	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	28.6	5	06/19/13 09:40	06/19/13 15:27	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	28.6	5	06/19/13 09:40	06/19/13 15:27	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	28.6	5	06/19/13 09:40	06/19/13 15:27	207-08-9	
Chrysene	60.3	ug/kg	28.6	5	06/19/13 09:40	06/19/13 15:27	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	28.6	5	06/19/13 09:40	06/19/13 15:27	53-70-3	
Fluoranthene	33.6	ug/kg	28.6	5	06/19/13 09:40	06/19/13 15:27	206-44-0	
Fluorene	346	ug/kg	28.6	5	06/19/13 09:40	06/19/13 15:27	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	28.6	5	06/19/13 09:40	06/19/13 15:27	193-39-5	
1-Methylnaphthalene	189	ug/kg	28.6	5	06/19/13 09:40	06/19/13 15:27	90-12-0	N2
2-Methylnaphthalene	53.9	ug/kg	28.6	5	06/19/13 09:40	06/19/13 15:27	91-57-6	
Naphthalene	45.7	ug/kg	28.6	5	06/19/13 09:40	06/19/13 15:27	91-20-3	1d
Phenanthrene	543	ug/kg	28.6	5	06/19/13 09:40	06/19/13 15:27	85-01-8	
Pyrene	51.1	ug/kg	28.6	5	06/19/13 09:40	06/19/13 15:27	129-00-0	
<b>Surrogates</b>								
2-Fluorobiphenyl (S)	67	%	38-110	5	06/19/13 09:40	06/19/13 15:27	321-60-8	
p-Terphenyl-d14 (S)	76	%	32-111	5	06/19/13 09:40	06/19/13 15:27	1718-51-0	

**Percent Moisture**

Analytical Method: ASTM D2974-87

Percent Moisture	13.5	%	0.10	1		06/17/13 15:49
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**4500 Chloride in Soil**

Analytical Method: SM 4500-Cl-E      Preparation Method: SM 4500-Cl-E

Chloride	ND	mg/kg	115	1	06/15/13 13:33	06/17/13 13:23	16887-00-6
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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: Citizens Energy 98510-05144  
Pace Project No.: 5081892

QC Batch: OEXT/33082 Analysis Method: EPA 8270 by SIM  
QC Batch Method: EPA 3546 Analysis Description: 8270 MSSV PAH by SIM  
Associated Lab Samples: 5081892001, 5081892002, 5081892003, 5081892004, 5081892005, 5081892006, 5081892007, 5081892008

METHOD BLANK: 934172 Matrix: Solid  
Associated Lab Samples: 5081892001, 5081892002, 5081892003, 5081892004, 5081892005, 5081892006, 5081892007, 5081892008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	ND	5.0	06/19/13 12:46	N2
2-Methylnaphthalene	ug/kg	ND	5.0	06/19/13 12:46	
Acenaphthene	ug/kg	ND	5.0	06/19/13 12:46	
Acenaphthylene	ug/kg	ND	5.0	06/19/13 12:46	
Anthracene	ug/kg	ND	5.0	06/19/13 12:46	
Benzo(a)anthracene	ug/kg	ND	5.0	06/19/13 12:46	
Benzo(a)pyrene	ug/kg	ND	5.0	06/19/13 12:46	
Benzo(b)fluoranthene	ug/kg	ND	5.0	06/19/13 12:46	
Benzo(g,h,i)perylene	ug/kg	ND	5.0	06/19/13 12:46	
Benzo(k)fluoranthene	ug/kg	ND	5.0	06/19/13 12:46	
Chrysene	ug/kg	ND	5.0	06/19/13 12:46	
Dibenz(a,h)anthracene	ug/kg	ND	5.0	06/19/13 12:46	
Fluoranthene	ug/kg	ND	5.0	06/19/13 12:46	
Fluorene	ug/kg	ND	5.0	06/19/13 12:46	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	5.0	06/19/13 12:46	
Naphthalene	ug/kg	ND	5.0	06/19/13 12:46	
Phenanthrene	ug/kg	ND	5.0	06/19/13 12:46	
Pyrene	ug/kg	ND	5.0	06/19/13 12:46	
2-Fluorobiphenyl (S)	%	76	38-110	06/19/13 12:46	
p-Terphenyl-d14 (S)	%	87	32-111	06/19/13 12:46	

LABORATORY CONTROL SAMPLE: 934173

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	333	237	71	40-102	N2
2-Methylnaphthalene	ug/kg	333	240	72	39-104	
Acenaphthene	ug/kg	333	245	73	43-108	
Acenaphthylene	ug/kg	333	251	75	44-110	
Anthracene	ug/kg	333	262	79	44-112	
Benzo(a)anthracene	ug/kg	333	266	80	43-124	
Benzo(a)pyrene	ug/kg	333	277	83	44-124	
Benzo(b)fluoranthene	ug/kg	333	284	85	44-123	
Benzo(g,h,i)perylene	ug/kg	333	274	82	44-118	
Benzo(k)fluoranthene	ug/kg	333	273	82	42-122	
Chrysene	ug/kg	333	274	82	44-124	
Dibenz(a,h)anthracene	ug/kg	333	281	84	44-119	
Fluoranthene	ug/kg	333	276	83	45-119	
Fluorene	ug/kg	333	261	78	44-113	
Indeno(1,2,3-cd)pyrene	ug/kg	333	277	83	44-119	
Naphthalene	ug/kg	333	229	69	42-103	
Phenanthrene	ug/kg	333	259	78	44-113	

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## QUALITY CONTROL DATA

Project: Citizens Energy 98510-05144  
Pace Project No.: 5081892

LABORATORY CONTROL SAMPLE: 934173

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Pyrene	ug/kg	333	276	83	45-123	
2-Fluorobiphenyl (S)	%.			70	38-110	
p-Terphenyl-d14 (S)	%.			79	32-111	

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: Citizens Energy 98510-05144  
Pace Project No.: 5081892

QC Batch: PMST/8384 Analysis Method: ASTM D2974-87  
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture  
Associated Lab Samples: 5081892001, 5081892002, 5081892003, 5081892004, 5081892005, 5081892006, 5081892007, 5081892008

SAMPLE DUPLICATE: 933052

Parameter	Units	5081867001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	19.2	19.3	0	5	

SAMPLE DUPLICATE: 933053

Parameter	Units	5081870005 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	18.1	18.8	3	5	

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: Citizens Energy 98510-05144  
Pace Project No.: 5081892

QC Batch: WETA/10058 Analysis Method: SM 4500-Cl-E  
QC Batch Method: SM 4500-Cl-E Analysis Description: 4500 Chloride  
Associated Lab Samples: 5081892001, 5081892002, 5081892003, 5081892004, 5081892005, 5081892006, 5081892007, 5081892008

METHOD BLANK: 932810 Matrix: Solid  
Associated Lab Samples: 5081892001, 5081892002, 5081892003, 5081892004, 5081892005, 5081892006, 5081892007, 5081892008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/kg	ND	100	06/17/13 13:13	

LABORATORY CONTROL SAMPLE: 932811

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/kg	200	187	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 932812 932813

Parameter	Units	5081892001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/kg	ND	231	231	278	278	98	98	90-110	0	20	

## REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: Citizens Energy 98510-05144  
Pace Project No.: 5081892

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

1d	Due to the extract's physical characteristics, the analysis was performed at dilution. CEM 06/19/13
N2	The lab does not hold TNI accreditation for this parameter.

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Citizens Energy 98510-05144  
Pace Project No.: 5081892

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5081892001	19	EPA 3546	OEXT/33082	EPA 8270 by SIM	MSSV/12791
5081892002	20	EPA 3546	OEXT/33082	EPA 8270 by SIM	MSSV/12791
5081892003	21	EPA 3546	OEXT/33082	EPA 8270 by SIM	MSSV/12791
5081892004	22	EPA 3546	OEXT/33082	EPA 8270 by SIM	MSSV/12791
5081892005	23	EPA 3546	OEXT/33082	EPA 8270 by SIM	MSSV/12791
5081892006	24	EPA 3546	OEXT/33082	EPA 8270 by SIM	MSSV/12791
5081892007	25	EPA 3546	OEXT/33082	EPA 8270 by SIM	MSSV/12791
5081892008	DUP	EPA 3546	OEXT/33082	EPA 8270 by SIM	MSSV/12791
5081892001	19	ASTM D2974-87	PMST/8384		
5081892002	20	ASTM D2974-87	PMST/8384		
5081892003	21	ASTM D2974-87	PMST/8384		
5081892004	22	ASTM D2974-87	PMST/8384		
5081892005	23	ASTM D2974-87	PMST/8384		
5081892006	24	ASTM D2974-87	PMST/8384		
5081892007	25	ASTM D2974-87	PMST/8384		
5081892008	DUP	ASTM D2974-87	PMST/8384		
5081892001	19	SM 4500-CI-E	WETA/10058	SM 4500-CI-E	WETA/10068
5081892002	20	SM 4500-CI-E	WETA/10058	SM 4500-CI-E	WETA/10068
5081892003	21	SM 4500-CI-E	WETA/10058	SM 4500-CI-E	WETA/10068
5081892004	22	SM 4500-CI-E	WETA/10058	SM 4500-CI-E	WETA/10068
5081892005	23	SM 4500-CI-E	WETA/10058	SM 4500-CI-E	WETA/10068
5081892006	24	SM 4500-CI-E	WETA/10058	SM 4500-CI-E	WETA/10068
5081892007	25	SM 4500-CI-E	WETA/10058	SM 4500-CI-E	WETA/10068
5081892008	DUP	SM 4500-CI-E	WETA/10058	SM 4500-CI-E	WETA/10068

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# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

## Section A Required Client Information:

Company: **EFI Global**  
Address: **8081 Cedar Run Dr Ste 121**  
Email To: **scott.verow@efi.com**  
Phone: **586 430** Fax:  
Requested Due Date/TAT:

## Section B Required Project Information:

Report To: **Scott Verow**  
Copy To: **Patrick Rohan 6/12/13**  
Purchase Order No.: **28510-05144**  
Project Name: **Citizens Energy**  
Project Number: **28510-05144**

## Section C Invoice Information:

Attention: **Lynn Yeary**  
Company Name:  
Address:  
Pace Quote Reference:  
Pace Project Manager:  
Pace Profile #:

Page: of  
**1661587**

**REGULATORY AGENCY**  
☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER  
☐ UST ☐ RCRA ☐ OTHER  
Site Location: **IA**  
STATE:

ITEM #	Section D Required Client Information		Matrix Codes MATRIX / CODE		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Analysis Test ↓ Y/N	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.							
	SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE		Drinking Water Water Waste Water Product Soil/Solid Oil Wipe Air Tissue Other	DW WT WW P SL OL WP AR TS OT			COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Methanol	Other	PAH	Total Chloride				Zn nitrate						
							DATE	TIME	DATE	TIME																						
1	19				G			6-12-13	1010		1																				601	
2	20								1015																							602
3	21								1030																							603
4	22								1035																							604
5	23								1108																							605
6	24								1110																							606
7	25								1115																							607
8	26																															608
9																																
10																																
11																																
12																																

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	<i>[Signature]</i>	6-12-13	1355	<i>[Signature]</i>	6/12/13	1355	4.0 Y N Y

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**ORIGINAL**

**SAMPLER NAME AND SIGNATURE**

PRINT Name of SAMPLER: **Scott Verow**

SIGNATURE of SAMPLER: *[Signature]*

DATE Signed (MM/DD/YY): **6-12-13**

Temp in °C

Received on Ice (Y/N)

Custody Sealed Cooler (Y/N)

Samples Intact (Y/N)

# Sample Condition Upon Receipt

Pace Analytical

Client Name: EFI Global

Project # 5081892

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☒ Other ICE

Thermometer Used 123456ABCDE

Type of Ice: ☒ Wet ☐ Blue ☐ None

☐ Samples on ice, cooling process has begun

Cooler Temperature  
(Corrected, if applicable)

4.0°C

Ice Visible in Sample Containers: ☐ yes ☒ no

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: 6/12/13 [Signature]

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	5.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
-Includes date/time/ID/Analysis		
All containers needing acid/base pres have been checked?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	9.
exceptions: VOA, calform, TOC, C&G		
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Project Manager Review		
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution:

Project Manager Review:

[Signature]

Date: 6/12/13

# Sample Container Count

CLIENT: EFI Global



COC PAGE 11 of 1587  
COC ID#

Project # 0081892

Sample Line

Item	DG9H	AG1U	WGFU	AG0U	R 4/6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	Comments
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														

## Container Codes

DG9H	40mL HCL amber voa vial	AG0U	100mL unpreserved amber glass	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved amber vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	AF	Air Filter	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved clear vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFU	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

Attachment 1.

Material Safety Data Sheet for  
Crude Oil





## CRUDE OIL

### Material Safety Data Sheet

#### SECTION I

#### PRODUCT IDENTIFICATION

Manufacturer's Name: Countrymark Refining and Logistics, LLC  
Address: 1200 Refinery Road  
Mt. Vernon, Indiana 47620

Emergency Telephone Number: 800-424-9300 (CHEMTREC)

Trade Names: Petroleum; Crude Oil; Mineral Oil; Rock Oil; Coal Oil; Seneca Oil; Earth Oil; Lima Oil

Chemical Name: Petroleum, Crude Oil

Chemical Family: Hydrocarbon

CAS Registry Number: 8002-05-9

#### SECTION II

#### HAZARDOUS INGREDIENTS

Petroleum (Crude Oil) consists of a mixture of hydrocarbons from methane and up - chiefly of the paraffins, cycloparaffins, or of cyclic aromatic hydrocarbons, with small amounts of benzene hydrocarbons, sulfur, nitrogen and oxygenated compounds. The terms paraffin base crude, naphthene or asphalt base crude, and aromatic base crude are used to indicate the most prevalent constituents of crudes from various localities.

#### SARA TITLE III SECTION 313

HAZARD AND TOXIC MATERIALS NOTIFICATION (This may not be a complete list of components.)

<u>Hazardous Component</u>	<u>CAS Number</u>	<u>Volume Range</u>
Toluene (Benzene, methyl)	108-88-3	0 to 1 %
Xylenes (Dimethyl Benzene)	1330-20-7	0 to 1 %
Benzene	71-43-2	0 to 1 %
Ethylbenzene	100-41-4	0 to 1 %
Cyclohexane (Benzene, hexahydro)	110-82-7	0 to 1 %
Hydrogen Sulfide (H <sub>2</sub> S)	7783-06-4	0 to 10 PPM

#### CERCLA INFORMATION

Under EPA-CWA, this product is considered an oil under Section 311. Spills into or leading to surface waters that cause a sheen must be reported to the National Response Center, 800-424-8802

#### RCRA INFORMATION

Under EPA-RCRA (40 CFR 261.21), if this product becomes a waste material, it would be an Ignitable Hazardous Waste., Hazardous Waste Number D001. Refer to the latest EPA or State Regulations regarding proper disposal.

### **SECTION III**

### **PHYSICAL DATA**

Boiling Point (°F)	<32 to 760+
Specific Gravity (H <sub>2</sub> O = 1) at 60° F	0.80 to 0.90
Vapor Pressure (mm. Hg) @ 60° F	< 500
Percent Volatile by Volume (%)	Varies with different Crudes
Solubility in Water	Insoluble
Viscosity	<50 SUS @ 100° F

#### **Appearance and Odor:**

Petroleum (Crude Oil) is a dark brown, greenish-brown, greenish fluorescent, or black-colored oily liquid depending upon its origin. It has a peculiar distinct heavy petroleum odor also varying with its place of origin and composition. Crude Oil may also have an odor of "rotten eggs" caused by hydrogen sulfide contamination.

### **SECTION IV**

### **FIRE AND EXPLOSION HAZARD DATA**

Flash Point (TCC)	< 80° F (The Flash Point is dependent upon the individual Crude Oil.)
Classification:	Flammable Liquid UN 1267
Flammable Limits:	LEL <u>N/A</u> UEL <u>N/A</u>
Extinguishing Media:	
Small Fires:	Dry Chemical, Carbon Dioxide, water spray, or foam.
Large Fires:	Water spray, fog, or foam

#### **Hazardous Decomposition Products:**

**WARNING:** Hydrogen Sulfide (H<sub>2</sub>S) and other hazardous vapors may evolve and collect in the headspace of storage tanks or other enclosed vessels. Hydrogen sulfide is an extremely flammable and highly toxic gas. Incomplete combustion may form toxic materials: Carbon Dioxide and Carbon Monoxide, plus various unidentified organic hydrocarbons may be formed.

#### **Special Fire Fighting Procedures:**

Cool containers with water spray to prevent re-ignition.

#### **Unusual Fire and Explosion Hazards:**

Avoid heat, open flames, and oxidizing agents such as Chlorine, Permanganates, and Dichromates.

### **SECTION V**

### **HEALTH HAZARD**

#### **Threshold Limit Value:**

No applicable information was found.

#### **Effects of Overexposure:**

None expected under normal conditions of use.

#### **Emergency and First Aid Procedures:**

IF IN EYES - Flush with large amounts of water, lifting upper and lower lids occasionally. Get medical attention.

IF ON SKIN - Thoroughly wash exposed area with soap and water. Remove contaminated clothing. Launder contaminated clothing before wearing.

IF INHALED - Remove individual to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm, quiet, and get medical attention.

IF SWALLOWED - Do not induce vomiting. Keep person warm, quiet and get medical attention.

## **SECTION VI**

## **REACTIVITY DATA**

Stable X Unstable \_\_\_\_\_

Incompatibility (Materials to avoid): Avoid contact with strong oxidizing agents like Chlorine, Permanganates, and Dichromates.

Hazardous Decomposition Products:

May form toxic materials of Carbon Dioxide, Carbon Monoxide, various hydrocarbons, etc. as combustion byproducts.

Hazardous Polymerization: May Occur \_\_\_\_ Will Not Occur X

## **SECTION VII**

## **SPILL OR LEAK PROCEDURES**

Steps to be taken in case material is released:

Small Spill: Eliminate all ignition sources (smoking, flares, flames, including pilot lights, electrical sparks, and etc.). Absorb liquid on paper, vermiculite, floor absorbent, or other absorbent material and place in non-leaking container for proper disposal.

Large Spill: Eliminate all ignition sources (smoking, flares, flames, including pilot lights, electrical sparks, and etc.). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank or truck. Remaining liquid may be taken up on sand, clay, earth, floor absorbent or other absorbent material and shoveled into non-leaking containers for proper disposal. Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

Waste Disposal Method:

Small Spill: Contaminated absorbent may be deposited in a landfill in accordance with local, state and federal regulations.

Large Spill: Reclaim as much as possible for reprocessing or salvage. Destroy by liquid incineration. Contaminated absorbent may be deposited in a landfill in accordance with local, state and federal regulations.

## **SECTION VIII**

## **SPECIAL PROTECTION INFORMATION**

Respiratory Protection:

Not needed for normal exposure. A NIOSH/MSHA jointly approved air supplied respirator is advised in absence of proper environmental control. Firefighters require SCBA Positive Pressure Breathing Apparatus when involved in petroleum fires.

Ventilation:

Ventilation is not required for normal conditions of use. If ventilation is needed, explosion-proof motors and fans are required to provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(S).

Personal Protective Equipment and Apparel:

Gloves: Wear petroleum resistant gloves such as: Neoprene, Nitrile, rubber gloves, etc.

Eye Protection: Safety goggles or face shield for protection from splashing in eyes.

Other Protective Equipment: Wear impervious protective clothing and boots appropriate for work situations to prevent repeated or prolonged skin contact. Launder contaminated clothing before wearing.

## **SECTION IX**

## **SPECIAL PRECAUTIONS**

Precautions to be taken when handling and storing:

Keep all containers in upright position with storage in cool, dry, well ventilated area away from heat, ignition, and strong oxidizers. Do not allow smoking in areas of use or dispensing. Motors, fans, switches, etc. in area of use or dispensing should be explosion proof. Ground containers when filling. Prevent all static and electric sparks.

Other Precautions:

Have written confined space and tank entry procedures. Never allow tank entry without checking OXYGEN AND VAPOR levels.

WARNING: Hydrogen Sulfide (H<sub>2</sub>S) and other hazardous vapors may evolve and collect in the headspace of storage tanks or other enclosed vessels. Hydrogen sulfide is an extremely flammable and highly toxic gas. Use safety harness and safety line on person entering a tank. Stand-by person required with protective equipment available.

## **SECTION X**

## **TOXICOLOGICAL INFORMATION**

No applicable information was found.

## **SECTION XI**

## **DOT LABELING INFORMATION**

Proper Shipping Name:	Petroleum Crude Oil
Hazardous Classification:	Flammable Liquid, 3, UN 1267, PG I (DOT ERG No. 27)
Identification Number:	UN 1267
Label(s) Required:	Flammable Liquid

## **DISCLAIMER OF LIABILITY**

The information in this MSDS was obtained from sources which we believe are reliable; however, the information is provided without any warranty, expressed or implied, regarding its correctness.

The conditions or methods of handling, storage, use and disposal of this product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.

This MSDS was prepared and is to be used only for this product. If this product is used as a component in another product or mixed with another product, this MSDS information may not be applicable.

Date of Preparation or Last Change: December 2012

# Attachment 2.

## Copies of Landfill Receipts

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Citizens Gas 2431 South, 275 West Bloomfield, IN 47424			e. Generator's Mailing Address: Citizens Gas 2700 South Belmont Ave Indianapolis, IN 46221		
f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No. Type	n. Total Quantity	o. Unit Wt/Vol
#3267 13 8622	5/28/2014	Contaminated Soil (oil + saltwater)		1	20 gal

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

DAVID GELHAUSEN		5-30-13
p. Generator Authorized Agent Name (Print)	q. Signature	r. Date

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Republic Services 5621 E Cottom Drive Pimento, IN 47866		
b. Phone: 812-299-9227		
Chris O'Leary		5-30-13
c. Driver Name (Print)	d. Signature	e. Date

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cottom Drive Pimento, IN 47866	c. US EPA Number	d. Discrepancy Indication Space:
b. Phone: 812-299-9227		
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		
e. Name of Authorized Agent (Print)	f. Signature	g. Date

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:
e. Special Handling Instructions and Additional Information:	
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.	
g. Operator's Name and Title (Print)	h. Signature
i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both	

SYCAMORE RIDGE LANDFILL  
5621 E COTTON RD  
PIMENTO IN 47866

000100  
RSWT ROLLOFF  
12820 S CUMMINSVILLE RD  
PIMENTO, IN 47866

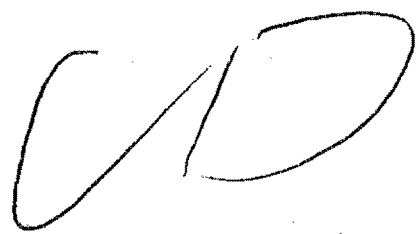
Contract# 3267138622

SITE 01	TICKET 177223	GRID 0000
WEIGHMASTER PETE R		
DATE IN 30 May 2013		TIME IN 1:37 pm
DATE OUT 30 May 2013		TIME OUT 1:56 pm
VEHICLE NEP3401		ROLL OFF
REFERENCE C GAS	ORIGIN GREENE IN	

01 Gross Weight 75,240.00 lb  
Tare Weight 39,500.00 lb  
Net Weight 35,740.00 lb 17.87 TN

Inbound - SCALE TICKET

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
17.87	TN	SW-CONT SOIL				



SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is **NOT** asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Citizens Gas 2431 South, 275 West Bloomfield, IN 47424			e. Generator's Mailing Address: Citizens Gas 2700 South Belmont Ave Indianapolis, IN 46221		
f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
#3267 13 8622	5/28/2014	Contaminated Soil (oil + saltwater)		1	20yd <sup>3</sup>

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print) DAVID GELHAUSEN	q. Signature <i>[Signature]</i>	r. Date 5-30-13
---	------------------------------------	--------------------

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Republic Services 5621 E Cottom Drive Pimento, IN 47866		
b. Phone: 812-299-9227		
c. Driver Name (Print) <i>[Signature]</i>	d. Signature <i>[Signature]</i>	e. Date 5-30-13

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cottom Drive Pimento, IN 47866	b. Phone: 812-299-9227	c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print)	f. Signature <i>[Signature]</i>	g. Date 5/30/13	

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



SYCAMORE RIDGE LANDFILL  
5621 E COTTON RD  
PIMENTO IN 47866

000100

RSWI ROLLOFF

12620 S CUMMINSVILLE RD  
PIMENTO, IN 47866

Contract#: 3267138622

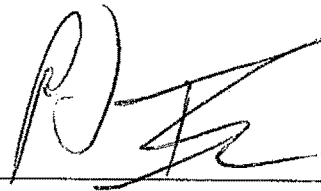
SITE	TICKET	GRID
01	177237	0000
WEIGHMASTER		
PETE R		
DATE IN	TIME IN	
30 May 2013	2:27 pm	
DATE OUT	TIME OUT	
30 May 2013	2:36 pm	
VEHICLE	ROLL OFF	
REF3403		
REFERENCE	ORIGIN	
C GAS	GREENE IN	

01 Gross Weight 70,580.00 lb  
Tare Weight 35,420.00 lb  
Net Weight 35,160.00 lb 17.58 TN

Inbound - SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
17.58	TN	SW-CONT SOIL				

SIGNATURE



UNEP AMOUNT
TENDERED
CHANGE
CHECK NO.

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

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f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
#3267 13 8622	5/28/2014	Contaminated Soil		1	20
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) John T. Shelton		q. Signature John T. Shelton		r. Date 5/30/13	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Republic Services 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227		
c. Driver Name (Print) B. INWIN	d. Signature B. INWIN	e. Date 5-30-13

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227		c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print)	f. Signature	g. Date 5/30/13	

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

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b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature 177261	
		i. Date 5/30/13	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

SYCAMORE RIDGE LANDFILL  
 5621 E COTTON RD  
 PIMENTO IN 47666

000100  
 RSWI ROLLOFF  
 12820 S CUMMINSVILLE RD  
 PIMENTO, IN 47666

Contract# 3267136622

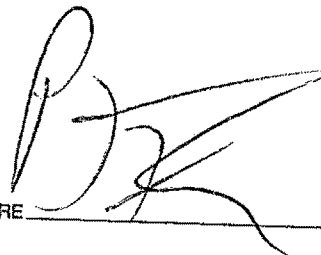
SITE	TICKET	GRID
01	177261	0000
WEIGHMASTER		
PETE R		
DATE IN	TIME IN	
30 May 2013	4:45 pm	
DATE OUT	TIME OUT	
30 May 2013	4:53 pm	
VEHICLE	ROLL OFF	
REF3403		
REFERENCE	ORIGIN	
C GAS	GREENE IN	

01 Gross Weight 70,560.00 lb  
 Tare Weight 35,340.00 lb  
 Net Weight 35,220.00 lb 17.61 TN

Inbound - SCALE TICKET

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
17.61	TN	SW-CONT SOIL				

SIGNATURE



NET AMOUNT
TENDERED
CHANGE
CHECK NO.

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

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f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:					
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j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
#3267 13 8622	5/28/2014	Contaminated Soil		1	20

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

John T. Shelton	John T. Shelton	5/30/13
p. Generator Authorized Agent Name (Print)	q. Signature	r. Date

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Republic Services 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227		
Chris Davies	[Signature]	5-30-13
c. Driver Name (Print)	d. Signature	e. Date

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227	c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		
[Signature]	[Signature]	5/30/13
e. Name of Authorized Agent (Print)	f. Signature	g. Date

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:
e. Special Handling Instructions and Additional Information:	
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.	
g. Operator's Name and Title (Print)	h. Signature
	177264 [Signature]
i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both	

SYCAMORE RIDGE LANDFILL  
5621 E COTTOM RD  
PIMENTO IN 47866

000100

RSWI ROLLOFF

12820 S CLIMMINSVILLE RD  
PIMENTO, IN 47866

Contract: 3267138622

SITE 01	TICKET 177264	GRID 0000
WEIGHMASTER PETE R		
DATE IN 30 May 2013		TIME IN 4:55 PM
DATE OUT 30 May 2013		TIME OUT 5:04 PM
VEHICLE REF3401		ROLL OFF
REFERENCE C GAS	ORIGIN GREENE IN	

01 Gross Weight 74,540.00 lb  
Tare Weight 36,840.00 lb  
Net Weight 37,700.00 lb 18.85 TN

Inbound - SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
18.85	TN	SW-CONT SOIL				

SIGNATURE \_\_\_\_\_



NET AMOUNT
TENDERED
CHANGE
CHECK NO.

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Citizens Gas 2431 South, 275 West Bloomfield, IN 47424			e. Generator's Mailing Address: Citizens Gas 2700 South Belmont Ave Indianapolis, IN 46221		
f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:			i. Owner's Phone No.:		
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
#3267 13 8622	5/28/2014	Contaminated Soil	1 DT	15 YRDT	
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) Ronald Sparks		q. Signature <i>Ronald Sparks</i>		r. Date 5-31-13	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Republic Services 5621 E Cottom Drive Pimento, IN 47866		
b. Phone: 812-299-9227		
c. Driver Name (Print) Dustin Breiten	d. Signature <i>Dustin Breiten</i>	e. Date 5-31-13

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cottom Drive Pimento, IN 47866		c. US EPA Number	d. Discrepancy Indication Space:
b. Phone: 812-299-9227			
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) R TUCKER	f. Signature <i>R Tucker</i>	g. Date 5-31-13	

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

# 177315 Rep 3426

SYCAMORE RIDGE LANDFILL  
5621 E COTTOM RD  
PIMENTO IN 47866

000100  
RSWI ROLLOFF  
12820 S CUMMINSVILLE RD  
PIMENTO, IN 47866

Contract#: 3267138622

SITE 01	TICKET 177315	GRID 0000
WEIGHMASTER ROBERT T		
DATE IN 31 May 2013	TIME IN 8:50 am	
DATE OUT 31 May 2013	TIME OUT 9:06 am	
VEHICLE REF3426	ROLL OFF	
REFERENCE CIT GAS	ORIGIN GREENE IN	

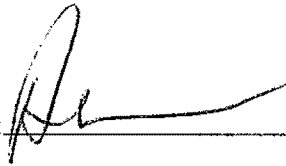
01 Gross Weight 62,400.00 lb  
Tare Weight 33,980.00 lb  
Net Weight 28,420.00 lb 14.21 TN

Inbound - SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
14.21	TN	SW-CONT SOIL				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE



If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is NOT asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Citizens Gas 2431 South, 275 West Bloomfield, IN 47424			e. Generator's Mailing Address: Citizens Gas 2700 South Belmont Ave Indianapolis, IN 46221		
f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No. Type	n. Total Quantity	o. Unit Wt/Vol
#3267 13 8622	5/28/2014	Contaminated Soil	1 RO	1	20
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) Ronald Sparks		q. Signature Ronald Sparks		r. Date 5-31-13	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Republic Services 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227		
c. Driver Name (Print) Chris Daves	d. Signature Chris Daves	e. Date 5-31-13

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-8227	c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		
e. Name of Authorized Agent (Print) [Signature]	f. Signature [Signature]	g. Date 5/31/13

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
h. Signature		j. Date	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated or the demolition or renovation operation or both

# 177358

REP 3401



SYCAMORE RIDGE LANDFILL  
5421 E COTTOM RD  
PIMENTO IN 47866

000100

RSWI ROLLOFF

12620 S CUMMINSVILLE RD  
PIMENTO, IN 47866

Contract# 3267138622

SITE 01	TICKET 177358	GRID 0000
WEIGHMASTER ROBERT T		
DATE IN 31 May 2013	TIME IN 11:27 am	
DATE OUT 31 May 2013	TIME OUT 11:46 am	
VEHICLE REF34-01	ROLL OFF	
REFERENCE C GAS	ORIGIN GREENE IN	

01 Gross Weight 82,580.00 lb  
Tare Weight 37,420.00 lb  
Net Weight 45,160.00 lb 22.58 TN

Inbound - SCALE TICKET

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.58	TN	SW-CONT SOIL				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE

CD

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Citizens Gas 2431 South, 275 West Bloomfield, IN 47424			e. Generator's Mailing Address: Citizens Gas 2700 South Belmont Ave Indianapolis, IN 46221		
f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
#3267 13 8622	5/28/2014	Contaminated Soil (oil + saltwater)	1	20	1 20 cyd

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

DAVID GELHARSON		5-31-13
p. Generator Authorized Agent Name (Print)	q. Signature	r. Date

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Republic Services 5621 E Cottom Drive Pimento, IN 47866		
b. Phone: 812-299-9227		
Destin Brenton		5-31-13
c. Driver Name (Print)	d. Signature	e. Date

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes III d-g)

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cottom Drive Pimento, IN 47866		c. US EPA Number	d. Discrepancy Indication Space:
b. Phone: 812-299-9227			
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
		5/31/13	
e. Name of Authorized Agent (Print)	f. Signature	g. Date	

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

# 177357

SYCAMORE RIDGE LANDFILL  
5621 E COTTON RD  
PIMENTO IN 47866

000100  
RSWI ROLLOFF  
12820 S CUMMINSVILLE RD  
PIMENTO, IN 47866

Contract: 3267138622

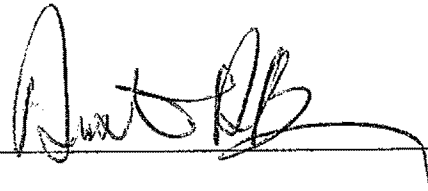
SITE 01	TICKET 177357	GRID 0000
WEIGHMASTER ROBERT T		
DATE IN 31 May 2013	TIME IN 11:31 am	
DATE OUT 31 May 2013	TIME OUT 11:44 am	
VEHICLE REF3426	ROLL OFF	
REFERENCE C GAS	ORIGIN GREENE IN	

01 Gross Weight 77,300.00 lb  
Tare Weight 34,800.00 lb  
Net Weight 42,500.00 lb 21.25 TN

Inbound - SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.25	TN	SW-CONT SOIL				

SIGNATURE



NET AMOUNT
TENDERED
CHANGE
CHECK NO.

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Citizens Gas 2431 South, 275 West Bloomfield, IN 47424			e. Generator's Mailing Address: Citizens Gas 2700 South Belmont Ave Indianapolis, IN 46221		
f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
#3267 13 8622	5/28/2014	Contaminated Soil (oil + salt water)	1	1	20 yd <sup>3</sup>
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
DAVID GELHAUSEN		[Signature]		5-31-13	
p. Generator Authorized Agent Name (Print)		q. Signature		r. Date	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Republic Services 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227		
c. Driver Name (Print)	d. Signature	e. Date
Chris D. ALCS	[Signature]	5-31-13

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227	c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		
e. Name of Authorized Agent (Print)	f. Signature	g. Date
		5/31/13

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:
e. Special Handling Instructions and Additional Information:	
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.	
g. Operator's Name and Title (Print)	i. Date
h. Signature	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both	

SYCAMORE RIDGE LANDFILL  
5621 E COTTON RD  
PIMENTO IN 47866

000100  
RSWI ROLLOFF  
12820 S CLIMINSVILLE RD  
PIMENTO IN 47866

Contract: 3267138622

01 Gross Weight 77,600.00 lb  
Tare Weight 35,820.00 lb  
Net Weight 41,980.00 lb 20.99 TN

SITE 01	TICKET 177407	GRID 0000
WEIGHMASTER PETE R		
DATE IN 31 May 2013		TIME IN 2:16 pm
DATE OUT 31 May 2013		TIME OUT 2:29 pm
VEHICLE REF3401		ROLL OFF
REFERENCE C GAS	ORIGIN GREENE IN	

Inbound 1 SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.99	TN	SW-CONT SOIL				

SIGNATURE

CO

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Citizens Gas 2431 South, 275 West Bloomfield, IN 47424			e. Generator's Mailing Address: Citizens Gas 2700 South Belmont Ave Indianapolis, IN 46221		
f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
#3267 13 8622	5/28/2014	Contaminated Soil (oil + saltwater)	1	20	20 yd <sup>3</sup>

**GENERATOR'S CERTIFICATION:** I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print)	q. Signature	r. Date
--	--------------	---------

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Republic Services 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227		
c. Driver Name (Print)	d. Signature	e. Date
DAVID GELHAUSEN	<i>[Signature]</i>	5.31.13

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227	c. US EPA Number	d. Discrepancy Indication Space:
<i>[Signature]</i>	<i>[Signature]</i>	5/31/13
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		
e. Name of Authorized Agent (Print)	f. Signature	g. Date
<i>[Signature]</i>	<i>[Signature]</i>	5-31-13

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		<i>[Signature]</i>	
		i. Date	
		5/31/13	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

SYCAMORE RIDGE LANDFILL  
5621 E COTTON RD  
PIMENTO IN 47866

000100  
RSWI ROLLOFF  
12620 S CUMMINSVILLE RD  
PIMENTO, IN 47866

Contract# 3267138422

SITE 01	TICKET 177408	GRID 0000
WEIGHMASTER PETE R		
DATE IN 31 May 2013		TIME IN 2:17 pm
DATE OUT 31 May 2013		TIME OUT 2:32 pm
VEHICLE REF0426		ROLL OFF
REFERENCE	ORIGIN GREENE IN	

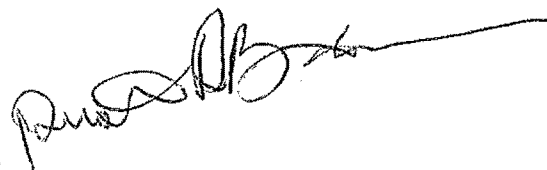
01 Gross Weight 69,300.00 lb  
Tare Weight 33,860.00 lb  
Net Weight 35,440.00 lb 17.72 TN

Inbound - SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
17.72	TN	SW-CONT SOIL				

REF AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE



If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Citizens Gas 2431 South, 275 West Bloomfield, IN 47424			e. Generator's Mailing Address: Citizens Gas 2700 South Belmont Ave Indianapolis, IN 46221		
f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	Type	n. Total Quantity
#3267 13 8622	5/28/2014	Contaminated Soil	1	200	200

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print) Devon Gillon	q. Signature <i>[Signature]</i>	r. Date 6-3-13
--	------------------------------------	-------------------

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Republic Services 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227		
c. Driver Name (Print) Jack Chizky	d. Signature <i>[Signature]</i>	e. Date 6/3/13

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227	c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		
e. Name of Authorized Agent (Print)	f. Signature <i>[Signature]</i>	g. Date 6/3/13

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:
e. Special Handling Instructions and Additional Information:	
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.	
g. Operator's Name and Title (Print)	i. Date <i>[Signature]</i>
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both	



SYCAMORE RIDGE LANDFILL  
5621 E COTTON RD  
PIMENTO IN 47866

000100

RSWI ROLLOFF

12820 S CUMMINSVILLE RD  
PIMENTO, IN 47866

Contract#: 3267138622

SITE 01	TICKET 177682	GRID 0000
WEIGHMASTER PETE R		
DATE IN 3 June 2013		TIME IN 2:59 pm
DATE OUT 3 June 2013		TIME OUT 3:19 pm
VEHICLE REF3425		ROLL OFF
REFERENCE C GAS	ORIGIN GREENE IN	

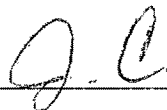
01 Gross Weight 75,500.00 lb  
Tare Weight 33,580.00 lb  
Net Weight 41,920.00 lb 20.96 TN

Inbound - SCALE TICKET

QTY.	UNIT.	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.96	TN	SW-CONT SOIL				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE



If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is NOT asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Citizens Gas 2431 South, 275 West Bloomfield, IN 47424			e. Generator's Mailing Address: Citizens Gas 2700 South Belmont Ave Indianapolis, IN 46221		
f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No. Type		n. Total Quantity
#3267 13 8622	5/28/2014	Contaminated Soil	1 Ro		1
					20
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) Devin Gillum		q. Signature D. Gillum		r. Date 6-3-13	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Republic Services 5621 E Cotton Drive Pimento, IN 47866		
b. Phone: 812-299-9227		
c. Driver Name (Print) Luis D. Ales	d. Signature 	e. Date 6-3-13

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cotton Drive Pimento, IN 47866	b. Phone: 812-299-9227	c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print)	f. Signature 	g. Date 6/3/13	

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature 	
		i. Date 6/3/13	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

SYCAMORE RIDGE LANDFILL  
 5621 E COTTON RD  
 PIMENTO IN 47866

000100  
 ASWI ROLLOFF  
 12620 S CLIMINSVILLE RD  
 PIMENTO, IN 47866

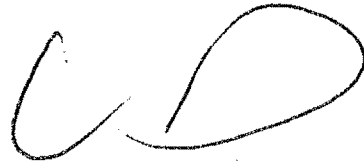
Contract: 3267138622

SITE 01	TICKET 177684	GRID 0000
WEIGHMASTER PETE R		
DATE IN 3 June 2013	TIME IN 3:43 pm	
DATE OUT 3 June 2013	TIME OUT 3:49 pm	
VEHICLE REF3401	ROLL OFF	
REFERENCE C GAS	ORIGIN GREENE IN	

01 Gross Weight 71,840.00 lb  
 Tare Weight 36,020.00 lb  
 Net Weight 35,820.00 lb 17.91 TN

Inbound - SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
17.91	TN	SW-CONT SOIL				



SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Citizens Gas 2431 South, 275 West Bloomfield, IN 47424			e. Generator's Mailing Address: Citizens Gas 2700 South Belmont Ave Indianapolis, IN 46221		
f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
#3267 13 8622	5/28/2014	Contaminated Soil	1	30	20 x 4

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print) <i>Ronald Sparks</i>		q. Signature <i>Ronald Sparks</i>	r. Date 6-5-13
--	--	--------------------------------------	-------------------

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Republic Services 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227		
c. Driver Name (Print) <i>Jack Christy</i>	d. Signature <i>Jack Christy</i>	e. Date 6/5/13

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227	c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		
e. Name of Authorized Agent (Print) <i>[Signature]</i>	f. Signature <i>[Signature]</i>	g. Date 6/5/13

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:
e. Special Handling Instructions and Additional Information:	
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.	
g. Operator's Name and Title (Print)	i. Date

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

SYCAMORE RIDGE LANDFILL  
5621 E COTTON RD  
PIMENTO IN 47866

000100  
RSWI ROLLOFF  
12820 S CUMMINSVILLE RD  
PIMENTO, IN 47866

Contract: 3267138622

SITE	TICKET	GRID
01	177927	0000
WEIGHMASTER		
ROBERT T		
DATE IN	5 June 2013	TIME IN 9:04 am
DATE OUT	5 June 2013	TIME OUT 9:21 am
VEHICLE	REF3425	ROLL OFF
REFERENCE	C GAS	ORIGIN
		GREENE IN

01 Gross Weight 49,960.00 lb  
Tare Weight 34,480.00 lb  
Net Weight 15,480.00 lb 7.74 TN

Inbound - SCALE TICKET

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
7.74	TN	SW-CONT SOIL				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE

*J.A.*

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Citizens Gas 2431 South, 275 West Bloomfield, IN 47424			e. Generator's Mailing Address: Citizens Gas 2700 South Belmont Ave Indianapolis, IN 46221		
f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
#3267 13 8622	5/28/2014	Contaminated Soil	1	20	Y
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) Devon Gibson		q. Signature <i>[Signature]</i>		r. Date 6-6-13	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Republic Services 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227		
c. Driver Name (Print) Jack Christy	d. Signature <i>[Signature]</i>	e. Date 6/6/13

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227	c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		
e. Name of Authorized Agent (Print)	f. Signature <i>[Signature]</i>	g. Date 6/6/13

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:
e. Special Handling Instructions and Additional Information:	
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.	
g. Operator's Name and Title (Print)	i. Date
h. Signature	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

1782709 REP 3426

SYCAMORE RIDGE LANDFILL  
5621 E COTTOM RD  
PIMENTO IN 47866

000100

RSWI ROLLOFF

12820 S CUMMINSVILLE RD  
PIMENTO, IN 47866

Contract: 3267138622

SITE 01	TICKET 178209	GRID 0000
WEIGHMASTER PETE R		
DATE IN 6 June 2013	TIME IN 1:50 pm	
DATE OUT 6 June 2013	TIME OUT 2:06 pm	
VEHICLE REP3426	ROLL OFF	
REFERENCE C GAS	ORIGIN GREENE IN	

01 Gross Weight 67,380.00 lb  
Tare Weight 33,580.00 lb  
Net Weight 33,800.00 lb 16.90 TN

Inbound - SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
16.90	TN	SW-CONT SOIL				

SIGNATURE

*J. C.*

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is NOT asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Citizens Gas 2431 South, 275 West Bloomfield, IN 47424			e. Generator's Mailing Address: Citizens Gas 2700 South Belmont Ave Indianapolis, IN 46221		
f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
#3267 13 8622	5/28/2014	Contaminated Soil	1 Roll OFF	20	20 yd
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) Ronald Sparks		q. Signature Ronald Sparks		r. Date 6-5-13	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Republic Services 5621 E Cotton Drive Pimento, IN 47866 b. Phone: 812-299-9227		
c. Driver Name (Print) Jack Christy	d. Signature Jack Christy	e. Date 6/7/13

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cotton Drive Pimento, IN 47866 b. Phone: 812-299-9227		c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) R. Tucker	f. Signature R. Tucker	g. Date 6-7-13	

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

Rep 3426 #178294



SYCAMORE RIDGE LANDFILL  
5621 E COTTON RD  
PIMENTO IN 47866

000100  
RSWI ROLLOFF  
12820 S CUMMINSVILLE RD  
PIMENTO, IN 47866

Contract: 3267138622

SITE	TICKET	GRID
01	178294	0000
WEIGHMASTER		
ROBERT T		
DATE IN	TIME IN	
7 June 2013	8:26 am	
DATE OUT	TIME OUT	
7 June 2013	8:50 am	
VEHICLE	ROLL OFF	
REP3426		
REFERENCE	ORIGIN	
CITIZENS GAS	GREENE IN	

01 Gross Weight 54,540.00 lb  
Tare Weight 33,520.00 lb  
Net Weight 23,020.00 lb 11.51 TN

Inbound - SCALE TICKET

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
11.51	TN	SW-CONT SOIL				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE

*J.C.*

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Citizens Gas 2431 South, 275 West Bloomfield, IN 47424			e. Generator's Mailing Address: Citizens Gas 2700 South Belmont Ave Indianapolis, IN 46221		
f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	Type	n. Total Quantity
#3267 13 8622	5/28/2014	Contaminated Soil	1	Roll off	20

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print) <i>Ronald Sparks</i>		q. Signature <i>Ronald Sparks</i>	r. Date 6-5-13
--	--	--------------------------------------	-------------------

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Republic Services 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227		
c. Driver Name (Print) <i>Jack Christy</i>	d. Signature <i>Jack Christy</i>	e. Date 6/7/13

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227	c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		
e. Name of Authorized Agent (Print) <i>[Signature]</i>	f. Signature <i>[Signature]</i>	g. Date 6/7/13

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

17F3339

17F3426

SYCAMORE RIDGE LANDFILL  
5621 E COTTON RD  
PIMENTO IN 47866

000100

RSWI ROLLOFF

12820 S CUMMINSVILLE RD

PIMENTO, IN 47866

Contract# 3267138622

SITE	TICKET	GRID
01	178339	0000
WEIGHMASTER		
PETE R		
DATE IN	TIME IN	
7 June 2013	11:23 am	
DATE OUT	TIME OUT	
7 June 2013	11:39 am	
VEHICLE	ROLL OFF	
REF3424		
REFERENCE	ORIGIN	
C GAS	GREENE IN	

01 Gross Weight 61,820.00 lb  
Stored Tare Weight 34,100.00 lb  
Net Weight 27,720.00 lb 13.86 TN

Inbound - SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
13.86	TN	SW-CONT SOIL				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE

*J.C.*

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is NOT asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Citizens Gas 2431 South, 275 West Bloomfield, IN 47424			e. Generator's Mailing Address: Citizens Gas 2700 South Belmont Ave Indianapolis, IN 46221		
f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	Type	n. Total Quantity
#3267 13 8622	5/28/2014	Contaminated Soil	1	Roll off	22 15
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) Ronald Sparks		q. Signature <i>Ronald Sparks</i>		r. Date 6-7-13	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Republic Services 5621 E Cottom Drive Pimento, IN 47866		
b. Phone: 812-299-9227		
c. Driver Name (Print) Jack Christy	d. Signature <i>Jack Christy</i>	e. Date 6/7/13

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cottom Drive Pimento, IN 47866		c. US EPA Number	d. Discrepancy Indication Space:
b. Phone: 812-299-9227			
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) <i>[Signature]</i>		f. Signature <i>[Signature]</i>	g. Date 6/7/13

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

178409 *[Signature]* 3426

SYCAMORE RIDGE LANDFILL  
5621 E COTTOM RD  
PIMENTO IN 47866

000100  
RSWT ROLLOFF  
12520 S CUMMINSVILLE RD  
PIMENTO, IN 47866

Contract: 3267138622

01 Gross Weight 46,940.00 lb  
Tare Weight 33,280.00 lb  
Net Weight 13,660.00 lb 6.83 TN

SITE	TICKET	GRID
01	178409	0000
WEIGHMASTER		
PETE R		
DATE IN	7 June 2013	TIME IN 2:51 pm
DATE OUT	7 June 2013	TIME OUT 3:12 pm
VEHICLE	REF3426	ROLL OFF
REFERENCE	C GAS	ORIGIN
GREENE IN		

Inbound - SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
6.83	TN	SW-CONT SOIL				

SIGNATURE

*J. A.*

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Citizens Gas 2431 South, 275 West Bloomfield, IN 47424			e. Generator's Mailing Address: Citizens Gas 2700 South Belmont Ave Indianapolis, IN 46221		
f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
#3267 13 8622	5/28/2014	Contaminated Soil (oil + saltwater)	1	20	1 20cyd
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) Ronald Sparks		q. Signature <i>Ronald Sparks</i>		r. Date 6-10-13	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Republic Services 5621 E Cottom Drive Pimento, IN 47866		
b. Phone: 812-299-9227		
c. Driver Name (Print) Jack Christy	d. Signature <i>Jack Christy</i>	e. Date 6/10/13

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cottom Drive Pimento, IN 47866		c. US EPA Number	d. Discrepancy Indication Space:
b. Phone: 812-299-9227			
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print)	f. Signature <i>[Signature]</i>	g. Date 6/10/13	

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

IF 178516

REP 3426

SYCAMORE RIDGE LANDFILL  
5621 E COTTON RD  
PIMENTO IN 47866

000100

RSWI ROLLOFF

12620 S CUMMINSVILLE RD

PIMENTO, IN 47866

Contract: 3267138622

SITE 01	TICKET 178516	GRID 0000
WEIGHMASTER ROBERT T		
DATE IN 10 June 2013		TIME IN 8:59 am
DATE OUT 10 June 2013		TIME OUT 9:21 am
VEHICLE REF3426		ROLL OFF
REFERENCE C GAS	ORIGIN GREENE IN	

01 Gross Weight 62,340.00 lb  
Tare Weight 33,320.00 lb  
Net Weight 29,020.00 lb 14.51 TN

Inbound - SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
14.51	TN	SW-CONT SOIL				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE

*J.C.*

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is NOT asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Citizens Gas 2431 South, 275 West Bloomfield, IN 47424			e. Generator's Mailing Address: Citizens Gas 2700 South Belmont Ave Indianapolis, IN 46221		
f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	Type	n. Total Quantity
#3267 13 8622	5/28/2014	Contaminated Soil	1	Roll off	2000 y
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) Ronald Sparks		q. Signature Ronald Sparks		r. Date 6-10-13	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Republic Services 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227		
c. Driver Name (Print) Jack Christy	d. Signature Jack Christy	e. Date 6/10/13

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227		c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) [Signature]		f. Signature [Signature]	g. Date 6/10/13

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated for the demolition or renovation operation or both

# 178569

KRP3426



SYCAMORE RIDGE LANDFILL  
5621 E COTTON RD  
PIMENTO IN 47866

000100  
RSWI ROLLOFF  
12820 S CUMMINSVILLE RD  
PIMENTO, IN 47866

Contract: 3267138422

SITE	TICKET	GRID
01	178569	0000
WEIGHMASTER		
ROBERT T		
DATE IN	TIME IN	
10 June 2013	11:54 am	
DATE OUT	TIME OUT	
10 June 2013	12:11 pm	
VEHICLE	ROLL OFF	
REF3426		
REFERENCE	ORIGIN	
C GAS	GREENE IN	

01 Gross Weight 58,320.00 lb  
Tare Weight 33,820.00 lb  
Net Weight 24,500.00 lb 12.25 TN

Inbound - SCALE TICKET

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
12.25	TN	SW-CONT SOIL				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE

*J.C.*

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Citizens Gas 2431 South, 275 West Bloomfield, IN 47424			e. Generator's Mailing Address: Citizens Gas 2700 South Belmont Ave Indianapolis, IN 46221		
f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
#3267 13 8622	5/28/2014	Contaminated Soil	1	20 yd	✓
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) Devon Gillum		q. Signature D. Gillum	r. Date 6-10-13		

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Republic Services 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227		
c. Driver Name (Print) Jack Christy	d. Signature Jack Christy	e. Date 6/10/13

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227		c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print)	f. Signature	g. Date 6/10/13	

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

SYCAMORE RIDGE LANDFILL  
5621 E COTTON RD  
PIMENTO IN 47866

000100

RSWI ROLLOFF

12820 S CUMMINGSVILLE RD  
PIMENTO, IN 47866

Contract: 3267138622

SITE	TICKET	GRID
01	178638	0000
WEIGHMASTER		
FETE R		
DATE IN	TIME IN	
10 June 2013	3:20 pm	
DATE OUT	TIME OUT	
10 June 2013	3:41 pm	
VEHICLE	ROLL OFF	
REP3426		
REFERENCE	ORIGIN	
C GAS	GREENE IN	

01 Gross Weight 61,900.00 lb  
Tare Weight 34,260.00 lb  
Net Weight 27,640.00 lb 13.82 TN

Inbound - SCALE TICKET

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
13.82	TN	SW-CONT SOIL				

NET AMOUNT

TENDERED

CHANGE

CHECK NO.

SIGNATURE

*J.C.*

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Citizens Gas 2431 South, 275 West Bloomfield, IN 47424			e. Generator's Mailing Address: Citizens Gas 2700 South Belmont Ave Indianapolis, IN 46221		
f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
#3267 13 8622	5/28/2014	Contaminated Soil	1 Roll off	20 yd	Y

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print) <i>Devon William</i>	q. Signature <i>Devon William</i>	r. Date 6-10-13
--	--------------------------------------	--------------------

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Republic Services 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227		
c. Driver Name (Print) <i>Jack Christy</i>	d. Signature <i>Jack Christy</i>	e. Date 6/11/13

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227	c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		
e. Name of Authorized Agent (Print) <i>R. TUCKER</i>	f. Signature <i>R. Tucker</i>	g. Date 6-11-13

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:
e. Special Handling Instructions and Additional Information:	
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations	
g. Operator's Name and Title (Print)	h. Signature
i. Date	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

Box 3426 # 178687

SYCAMORE RIDGE LANDFILL  
5621 E COTTOM RD  
PIMENTO IN 47666

000100

RSWI ROLLOFF

12920 S CUMMINSVILLE RD  
PIMENTO, IN 47666

Contract: 3267136622

SITE 01	TICKET 175687	GRID 0000
WEIGHMASTER ROBERT T		
DATE IN 11 June 2013		TIME IN 8:06 am
DATE OUT 11 June 2013		TIME OUT 8:25 am
VEHICLE BEP3426		ROLL OFF
REFERENCE	ORIGIN GREENE IN	

01 Gross Weight 63,660.00 lb  
Tare Weight 35,260.00 lb  
Net Weight 28,400.00 lb 14.20 TN

Inbound - SCALE TICKET

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
14.20	TN	SW-CONT SOIL				

NEW AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE

*J.C.*

If waste is asbestos waste, complete Sections I, II, III and IV  
 If waste is **NOT** asbestos waste, complete Sections I, II and III

**I. GENERATOR (Generator completes Ia-r)**

a. Generator's US EPA ID Number		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Citizens Gas 2431 South, 275 West Bloomfield, IN 47424			e. Generator's Mailing Address: Citizens Gas 2700 South Belmont Ave Indianapolis, IN 46221		
f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
#3267 13 8622	5/28/2014	Contaminated Soil <i>SOIL Contamination</i>	1	1	20 gal

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print) <i>Ronald Sparks</i>	q. Signature <i>Ronald Sparks</i>	r. Date <i>6-11-13</i>
--	--------------------------------------	---------------------------

**II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)**

a. Transporter's Name and Address: Republic Services 5621 E Cotton Drive Pimento, IN 47866 b. Phone: 812-299-9227		
c. Driver Name (Print) <i>Jack Christy</i>	d. Signature <i>Jack Christy</i>	e. Date <i>6/11/13</i>

**III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)**

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cotton Drive Pimento, IN 47866 b. Phone: 812-299-9227	c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		
e. Name of Authorized Agent (Print) <i>[Signature]</i>	f. Signature <i>[Signature]</i>	g. Date <i>6/11/13</i>

**IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)**

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:
e. Special Handling Instructions and Additional Information:	
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both      % Friable      % Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.	
g. Operator's Name and Title (Print)	h. Signature
i. Date	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both

*17875.3*      *KAP3426*

SYCAMORE RIDGE LANDFILL  
5621 E COTTON RD  
PIMENTO IN 47866

000100  
RSWI ROLLOFF  
12820 S CUMMINSVILLE RD  
PIMENTO, IN 47866

Contract: 3267138622

SITE	TICKET	GRID
01	178753	0000
WEIGHMASTER		
PETE R		
DATE IN	TIME IN	
11 June 2013	11:41 am	
DATE OUT	TIME OUT	
11 June 2013	1:56 am	
VEHICLE	ROLL OFF	
REF3426		
REFERENCE	ORIGIN	
C GAS	GREENE IN	

01 Gross Weight 61,180.00 lb  
Tare Weight 36,820.00 lb  
Net Weight 24,360.00 lb 12.18 TN

Inbound - SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
12.18	TN	SW-CONT SOIL				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE

*[Signature]*

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Citizens Gas 2431 South, 275 West Bloomfield, IN 47424			e. Generator's Mailing Address: Citizens Gas 2700 South Belmont Ave Indianapolis, IN 46221		
f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
#3267 13 8622	5/28/2014	Contaminated Soil <i>soil Contamination</i>	1	1	20 gal
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
<i>Ronald Sparks</i>		<i>Ronald Sparks</i>		6/12/13	
p. Generator Authorized Agent Name (Print)		q. Signature		r. Date	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Republic Services 5621 E Cotton Drive Pimento, IN 47866		
b. Phone: 812-299-9227		
<i>Jack Christy</i>	<i>Jack Christy</i>	6/12/13
c. Driver Name (Print)	d. Signature	e. Date

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cotton Drive Pimento, IN 47866		c. US EPA Number	d. Discrepancy Indication Space:
b. Phone: 812-299-9227			
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
<i>[Signature]</i>		6/12/13	
e. Name of Authorized Agent (Print)	f. Signature	g. Date	

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

178877

*[Signature]*



SYCAMORE RIDGE LANDFILL  
5621 E COTTON RD  
PIMENTO IN 47866

000100  
RSWI ROLLOFF  
12820 S CUMMINSVILLE RD  
PIMENTO, IN 47866

Contract: 3267138622

SITE 01	TICKET 178877	GRID 0000
WEIGHMASTER ROBERT T		
DATE IN 12 June 2013		TIME IN 8:52 am
DATE OUT 12 June 2013		TIME OUT 9:09 am
VEHICLE REF3426		ROLL OFF
REFERENCE C GAS	ORIGIN GREENE IN	

01 Gross Weight 56,480.00 lb  
Tare Weight 33,140.00 lb  
Net Weight 23,340.00 lb 11.67 TN

Inbound - SCALE TICKET

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
11.67	TN	SW-CONT SOIL				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE

*J.C.*

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Citizens Gas 2431 South, 275 West Bloomfield, IN 47424			e. Generator's Mailing Address: Citizens Gas 2700 South Belmont Ave Indianapolis, IN 46221		
f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
#3267 13 8622	5/28/2014	Contaminated Soil <i>(oil + salt water)</i>	1 RO	1	20 cy
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) <i>DAVID GELHAUSEN</i>		q. Signature <i>[Signature]</i>		r. Date <i>6.12.13</i>	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Republic Services 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227		
c. Driver Name (Print) <i>Jack Christy</i>	d. Signature <i>[Signature]</i>	e. Date <i>6/12/13</i>

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227	c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		
e. Name of Authorized Agent (Print) <i>[Signature]</i>	f. Signature <i>[Signature]</i>	g. Date <i>6/12/13</i>

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature <i>[Signature]</i>	
		i. Date <i>6/23/2014</i>	

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated or the demolition or renovation operation or both

# 178929

SYCAMORE RIDGE LANDFILL  
5621 E COTTON RD  
PIMENTO IN 47866

000100  
RSWI ROLLOFF  
12820 S CUMMINSVILLE RD  
PIMENTO, IN 47866

Contract#: 3267138622

SITE	TICKET	GRID
01	178929	0000
WEIGHMASTER		
ROBERT T		
DATE IN	TIME IN	
12 June 2013	11:44 AM	
DATE OUT	TIME OUT	
12 June 2013	12:04 PM	
VEHICLE	ROLL OFF	
REF34-26		
REFERENCE	ORIGIN	
C GAS		GREENE IN

01 Gross Weight 60,480.00 lb  
Tare Weight 33,360.00 lb  
Net Weight 27,120.00 lb 13.56 TN

Inbound - SCALE TICKET

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
13.56	TN	SW-CONT SOIL				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE

*J.C.*

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is NOT asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Citizens Gas 2431 South, 275 West Bloomfield, IN 47424			e. Generator's Mailing Address: Citizens Gas 2700 South Belmont Ave Indianapolis, IN 46221		
f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
#3267 13 8622	5/28/2014	Contaminated Soil <i>SOIL Contamination</i>	1	1	20 yd
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) <i>Ronald Sparks</i>		q. Signature <i>Ronald Sparks</i>		r. Date	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Republic Services 5621 E Cotton Drive Pimento, IN 47866 b. Phone: 812-299-9227		
c. Driver Name (Print) <i>Jack Christy</i>	d. Signature <i>Jack Christy</i>	e. Date <i>6/12/13</i>

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cotton Drive Pimento, IN 47866 b. Phone: 812-299-9227	c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		
e. Name of Authorized Agent (Print) <i>[Signature]</i>	f. Signature <i>[Signature]</i>	g. Date <i>6/12/13</i>

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:
e. Special Handling Instructions and Additional Information:	
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.	
g. Operator's Name and Title (Print)	i. Date
h. Signature	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both	

17F990

RA3426

SYCAMORE RIDGE LANDFILL  
5621 E COTTON RD  
PIMENTO IN 47566

000100  
RSWT ROLLOFF  
12520 S CUMMINSVILLE RD  
PIMENTO, IN 47566

Contract# 3267138622

SITE	TICKET	GRID
01	178990	0000
WEIGHMASTER		
FETE R		
DATE IN	12 June 2013	TIME IN 2:48 PM
DATE OUT	12 June 2013	TIME OUT 3:03 PM
VEHICLE	REF3424	ROLL OFF
REFERENCE	C GAS	ORIGIN
		GREENE IN

01 Gross Weight 54,580.00 lb  
Tare Weight 33,800.00 lb  
Net Weight 20,780.00 lb 10.39 TN

Inbound - SCALE TICKET

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
10.39	TN	SW-CONT SOIL				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE

*J.C.*

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is NOT asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Citizens Gas 2431 South, 275 West Bloomfield, IN 47424			e. Generator's Mailing Address: Citizens Gas 2700 South Belmont Ave Indianapolis, IN 46221		
f. Phone: 317-693-8716			g. Phone: 317-693-8716		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
#3267 13 8622	5/28/2014	Contaminated Soil <i>SOIL Contamination</i>	1	1	20 gal
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
<i>Ronald Sparks</i>		<i>Ronald Sparks</i>		6-13-13	
p. Generator Authorized Agent Name (Print)		q. Signature		r. Date	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Republic Services 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227		
<i>Jack Christy</i>	<i>Jack Christy</i>	6/13/13
c. Driver Name (Print)	d. Signature	e. Date

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Sycamore Ridge Landfill 5621 E Cottom Drive Pimento, IN 47866 b. Phone: 812-299-9227	c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		
<i>R. TUCKER</i>	<i>R. Tucker</i>	6-13-13
e. Name of Authorized Agent (Print)	f. Signature	g. Date

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:
b. Phone:	d. Phone:
e. Special Handling Instructions and Additional Information:	
f. <input checked="" type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable	
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.	
g. Operator's Name and Title (Print)	i. Date
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both	

Rev 3426 # 179045

SYCAMORE RIDGE LANDFILL  
5621 E COTTOM RD  
PIMENTO IN 47866

000100  
RSWI ROLLOFF  
13820 S CUMMINSVILLE RD  
PIMENTO, IN 47866

Contract: 3267138622

SITE	TICKET	GRID
01	179045	0000
WEIGHMASTER		
ROBERT T		
DATE IN	TIME IN	
13 June 2013	7:46 am	
DATE OUT	TIME OUT	
13 June 2013	8:12 am	
VEHICLE	ROLL OFF	
REP3426		
REFERENCE	ORIGIN	
CITIZENS GAS	GREENE IN	

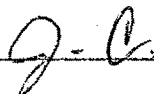
01 Gross Weight 66,520.00 lb  
Tare Weight 34,520.00 lb  
Net Weight 32,000.00 lb 16.00 TN

Inbound - SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
16.00	TN	SW-CONT SOIL				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

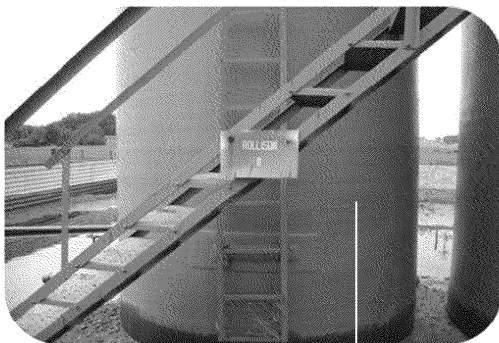
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Attachment 3.

Photo Documentation of  
Response & Remediation  
Activities

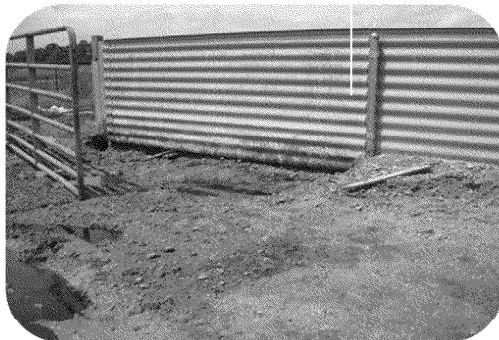




Rollison II Tank Battery



Rollison II Separator  
Tank Point of Release



Rollison II Secondary Containment Point of Release



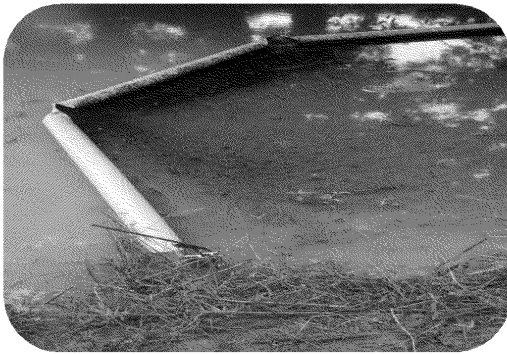
Path of Release across Rollison II Lease Road (from right  
to left) into Hay Field Looking West



View of Hay Field Prior to Mowing Looking Southwest



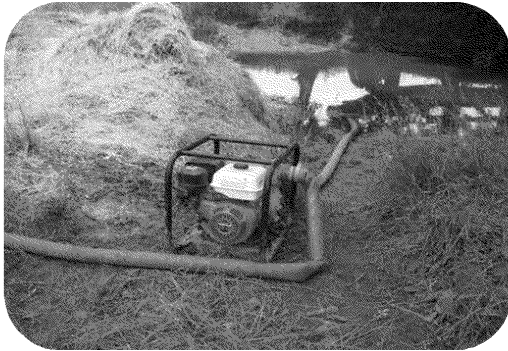
Path of Release Viewed from Rollison II Lease Road  
Showing Flow into Hay Field Looking Southwest



The Recovery Pond Created by Earthen Dam



The Earthen Dam Constructed Early in the Incident to  
Prevent Material from Reaching White River



The "Trash Pump" Used to Lower the Water Level in the Recovery Pond



Straw Bales After Relocation to the West Side of Hay Field to Allow Better Equipment Access to Excavation Area



Straw Bales Installed at the Point Where the Ditch Turns South to Prevent Flow From the Southwest Corner of Hay Field



The South End of the Hay Field (Looking West) Alongside the Ditch  
Straw Bale Barrier to Prevent Flow Into the Ditch



Citizens Staff Placing Straw Bales Near the Lease Road



View of the Hay Field (Looking Southwest) From the Lease Road Showing Straw Bale Barrier and Released Material in Field



Citizens Front Loader Removing Contaminated Grass From the Hay Field for Loading Into Lined Roll-Off Dumpster



Soil Excavation and Grass Removal From the Hay Field



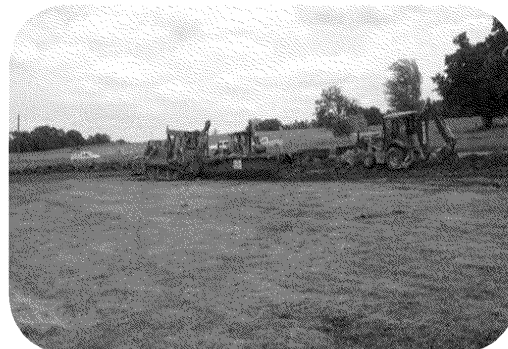
Excavated Soil Ready to be Loaded Into Lined Roll-Off Dumpsters



Citizens Operator Excavating Soil in the North End of Hay Field Next to the Rollison II Lease Road



Lined Roll-Off Dumpster Filled and Ready to be Hauled to the Landfill



Soil Excavation Work in the Hay Field



View of the Completed Soil Excavation on the East Side of the Hay Field Looking South



Another View of the East Side of the Soil Excavation Area (Looking South) Showing the Remaining Clean Soil

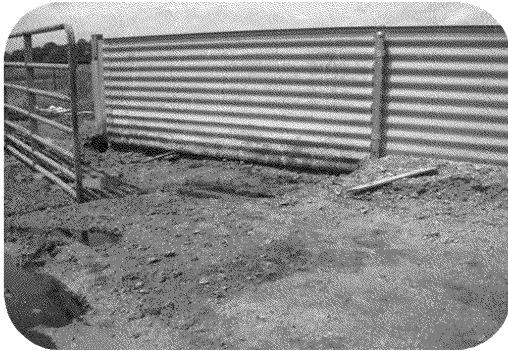


View of the Central Area of the Hay Field Looking Southwest After Completion of the Soil Excavation



View of the Completed Soil Excavation Showing the Area Looking West Along the Rollison II Lease Road and the Western Boundary of the Excavation

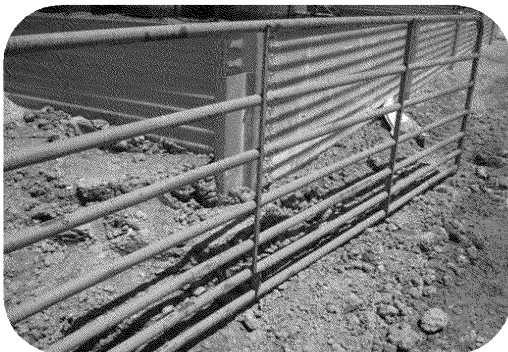




Picture Taken Soon After the Incident Showing Area  
Where Release Escaped Secondary Containment



Close-Up View From Inside the Secondary Containment  
Showing Clay Washout



The Repair of the Secondary Containment After Clay  
Reinforcement Was Added to the Outside



View of the Repair of the Secondary Containment  
Clay Has Been Added to Both Sides of the Barrier

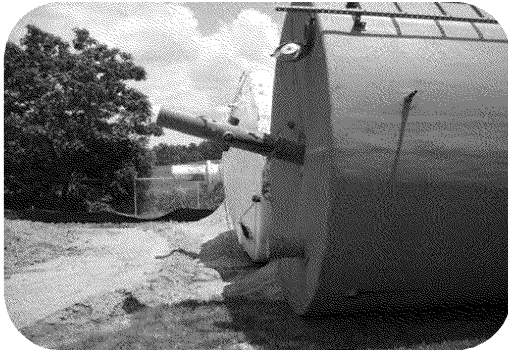
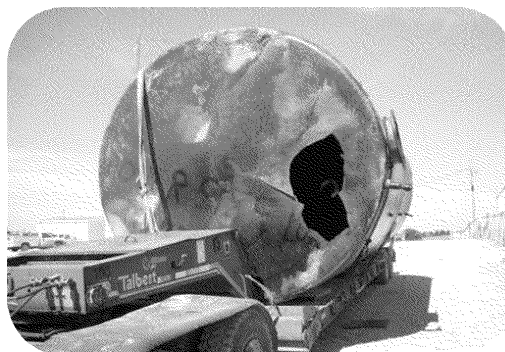


Photo Showing Top of Rollison II Separator Tank which Collapsed during Release



Rollison II Separator Tank Foundation Showing Washout of Portion of Foundation



View of Tank Showing Hole and Splits in Fiberglass Bottom